# LDK 100DPMTM 12-BIT DIGITAL BROADCAST CAMERA



# Top-end tools made affordable

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 everyone's requirement in mind, regardless of whether they 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 adopt top-end technology and design so that it is within reach for every professional in the industry. A camera system that no longer limit's people's wishes to get the best out of themselves or their company. 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.

Additionally, 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 new levels of picture performance and precision that are not attainable with 10-bit technology.

- 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
- Superb DPM<sup>™</sup> Sensors for natural scene reproduction
- Quick and easy set-up of both operational and advanced technical settings







#### 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 100DPM $^{\text{TM}}$  and feel the difference.

Not only does it's lightweight yet durable magnesium design make it a favorite, the convenient shape, easily adjustable shoulder pad and (optional) unique integrated zoom grip make it possible for operators to fully focus their energy on creative shooting.

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

LDK 100DPM™ users enjoy the benefit of universally applicable accessories that are available for the entire LDK Series. Whether it is the Series 9000 Camera



Control System, the range of viewfinders, or the SuperXPander large lens adapter, your LDK 100DPM™ 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 100DPM™ in their existing infrastructure while making optimum use of previous investments.

Others will find that the LDK 100DPM™ 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

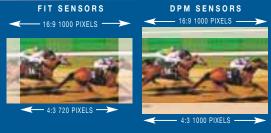
#### The LDK 100DPM™: your ticket to the future

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 adapt your outfit accordingly. This feature is invaluable, especially in a time of rapid and unexpected change.

#### Suited for your applications

The LDK 100DPM $^{\text{TM}}$  is equipped with DPM $^{\text{TM}}$  CCD sensors, providing you with the ultimate in digital acquisition.





With a dynamic range of 600% the LDK 100DPM<sup>TM</sup> is capable of handling highlights like no other camera, as it covers scenes with demanding, high-contrast lighting conditions. Moreover, it serves you with the better of two worlds in aspect ratios. Dynamic Pixel Management allows advanced switching between standard 4:3 and wide-screen shooting at the touch of a button and without compromising either the horizontal or vertical resolution. In addition, the horizontal viewing angle remains the same in both formats, thus eliminating the need for costly investments in crossover lenses.

The LDK 100DPM<sup>™</sup>, therefore, feels just perfect when shooting high-profile drama productions, rock concerts, live sports and entertainment game shows. The thousands of LDK 100DPM<sup>™</sup> cameras sold since its introduction have proved it is the ideal camera for rental companies, broadcasters and mobile facilities.

# Quick and easy setting-up of operational and technical parameters

The LDK 100DPM<sup>™</sup> 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 100DPM<sup>™</sup> has 'Intel Inside'. This powerful processor manages the automatics and video DSPs, the built-in self-diagnostics and self-calibration circuits. And especially for the connoisseurs, the LDK 100DPM<sup>™</sup> features two on-board lens files to correct for lens faults, shading differences and perfect color matching. 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 100DPM™ 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 100DPM™ into his or her preferred camera.



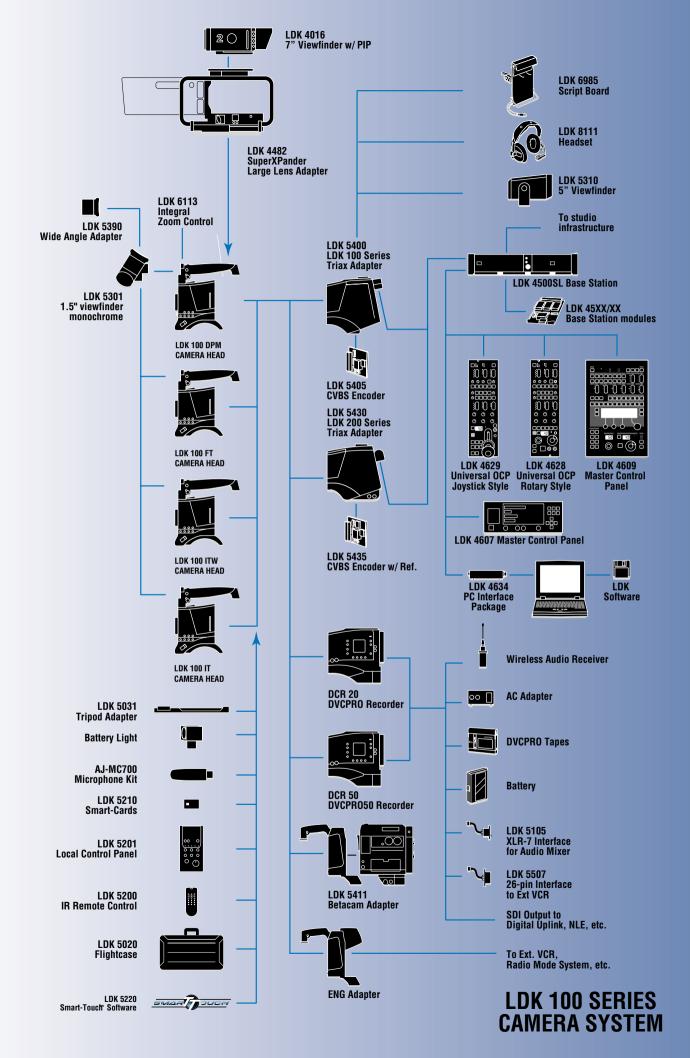
#### LDK 4500SL Series SlimLine SDTV Camera Base Station

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.



Join the family of LDK 100 Series users and experience all these benefits and more. Whether you're an operator, engineer, producer or financial controller, you'll agree that LDK 100DPM™ has made top-class 'tools' affordable.





#### **TECHNICAL SPECIFICATIONS**

**GENERAL** 

Power requirements Power consumption

Operating temperature Storage temperature Weight

Triax cable length

CAMERA SECTION

Pick-up device

Picture elements

Digital quantization
Digital signal processing

Sensitivity Minimum illumination Exposure control

Clean scanning

Optical system
Optical filters

Modulation depth

S/N ratio

Vertical resolution TV lines

Registration

Dynamic range

Dynamic range

Gain

20 W (including optional 1.5" viewfinder and triax adaptor) -20°C to 45°C (-4°F to 113°F) -20°C to 60°C (-4°F to 140°F)

Triax powered or DC 12V

4.9 kg (including optional 1.5" viewfinder and triax adaptor)
RGB transmission max. 3000m with 14mm cable (9,900ft with 0,55" cable)

0 0/01 DI II FT

3x 2/3" Philps FT sensors or 3x 2/3" switchable DPM sensors NTSC: 1000 (H) x 498 (V)

PAL: 1000 (H) x 594 (V)
12 bits A/D
18 MHz and 36 MHz,
24 bits accuracy

2000 lux at F9.0, 89.9% reflection approx. 1 lux (F1.4 lens +36 dB gain) down to 1/1000

NTSC: 61.1 - 151.0 Hz PAL: 51.0 - 103.0 Hz F1.4 with quartz filter

clear, 1/4 ND, 1/16 ND, 1/64 ND 70 % typ. at 5 MHz (equals Hor Resolution of

700 TV lines 16:9) NTSC: 63 dB (typical) PAL: 61 dB (typical)

850 TV lines 4:3 and

PAL: 480, NTSC: 400 <0.05% (all zones, without lens)

>600%

-6 dB to +36 dB in 3 dB steps

(user defined presets)
1.5" viewfinder (optional)

1.5" VIEWFINDER (optional)

Resolution Features 1.5" monochrome >600 TV lines (center)

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: Fisher, ARD, Lemo,Trilock
Video (CVBS) BNC (1.0 Vp-p, 75 Ohm),
using optional encoder

Viewfinder 20 pin

Monitor (Y) BNC (1.0 Vp-p, 75 Ohm), viewfinder signal or

ext. video signal (from base station)

Script light 12 V, 0.25 A, 3 pin Fisher

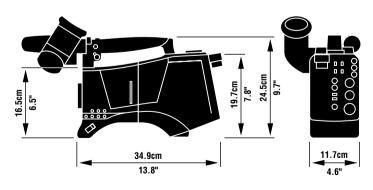
Lens 12 pin

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™

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



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