LDK 6000 mk II

Flexible, Multi-Format High-Definition Camera

Grass Valley™ products from Thomson Broadcast and Media Solutions offer the most comprehensive, multi-format solutions for acquisition, production, storage and playback—and a strong foundation for centralized, proactive status and activity monitoring. These solutions include one of the broadest selections of standard-definition (SD) and high-definition (HD) digital video cameras. With one of the best known imaging design teams in the world and five technical Emmy® awards, Grass Valley camera products continue to break ground with innovation and creative ideas. The LDK 6000 mk II is no exception.

The LDK 6000 mk II offers the highest quality picture available for everything from remote-controlled, portable hand-held, mobile and studio applications, to EFP uses for SD and HD productions—even digital cinematography.

With three 9.2-million pixel HD-DPM+™ CCDs, the LDK 6000 mk II is the only camera available that can capture true progressive HD images, natively, and switch instantly between multiple formats and frame rates. Coupled with an extensive feature set, format flexibility, and excellent performance, it's a perfect match for the intense demands of today's productions.

The LDK 6000 mk II camera head is available in two versions: Standard and WorldCam. The Standard version supports 1080i/720p HD formats in 50 and 59.94 Hz, and simultaneously provides high-quality SD output in either 50 or 59.94 Hz. The WorldCam version adds support for all recognized worldwide HD formats, including 24p for digital cinematography acquisition—and provides convenient built-in frame-rate conversion.

With a lightweight, ergonomic design, the LDK 6000 mk II speeds production workflows with focus-assist tools and smart cards that store image and operational settings. And its transmission system interfaces with standard triax- as well as fiber-based infrastructures for maximum flexibility.

For digital transition management, the LDK 6000 mk II features a compact, robust, and lightweight base station that can output SD and HD signals simultaneously. The camera can be equipped with a Grass Valley SuperXpander large lens adapter and an optional HD high-resolution viewfinder and turn it into a fully featured studio head.

CCDs Ensure Exceptional Output

Three 9.2-million pixel HD DPM+ CCDs inside the LDK 6000 mk II ensure exceptional image quality. These CCDs are based on frame-transfer technology so there is no lag or smear in the images you create. They also offer an extraordinary signal-to-noise ratio and sensitivity, high efficiency, and, through the use of on-chip amplifiers, a significant reduction in a signal's noise floor.

key features

- Captures true progressive HD images natively, in multiple formats and frame rates and outputs high-quality SD images in addition to the HD output

- Supports 1080i and 720p formats at 50 and 59.94 Hz

- Supports instant switching between 720p and 1080i for a wide variety of applications

- Unrivaled video processing architecture:
  – Three 9.2-million pixel HD-DPM+ CCDs
  – 12-bit A-to-D conversion
  – 22-bit digital signal processing

- Emmy award-winning dual skin contour circuit makes talent look its best

- Unique focus-assist tools:
  – Crawler, for creating motion on the edges of an object in focus
  – Instant push-button electronic zoom for focusing on small details

- Smart cards store picture, operational settings for easy recall

- Flexible HD transmission system
  – Supports standard triax up to 3,300 feet/ 1,000 meters
  – Supports hybrid fiber SMPTE 311 up to 13,200 feet/4,000 meters

- Small, robust base station with superior HD, SD outputs

- Lightest weight camera body in its class

- In triax mode, SuperXPander support enables configuration with studio lenses, accessories

The 12-bit analog-to-digital converters of the LDK 6000 mk II bring the camera's optimum picture quality to the digital domain. Two dedicated digital signal processors (DSPs) perform all major camera functions (i.e., knee, gamma, contour, and variable matrix) with higher than 22-bit precision. The DSPs also contain powerful features, such as digital cosmetics with independent, Emmy award-winning dual skin contour circuits to improve facial tones, as well as extensive colorimetry and color-matching capabilities.

Easy, Native HD Format Switching

The LDK 6000 mk II enables easy HD format switching via a simple menu on the camera or the camera control system. The camera's CCDs group the pixels on the sensors to create the correct number of video lines necessary for a chosen format, minimizing unnecessary electronic processing.

The result? No quality degradation when switching formats.

Two Versions Available

The LDK 6000 mk II camera head is available in two versions: Standard and WorldCam.

The Standard version supports 1080i/720p HD formats in 50 and 59.94 Hz, and simultaneously provides high-quality SDTV output in either 50 or 59.94 Hz. The WorldCam version provides all the functionality of the Standard version as well as support for digital cinematography formats in 1080p and 720p. These formats provide an impression of motion (motion portrayal) comparable to that of film cameras running at the same speeds.

The WorldCam version of the LDK 6000 mk II also provides convenient built-in frame-rate conversion for easy connection to existing HD peripherals. As a result, you get cost-effective monitoring and recording combined with the motion portrayal of film cameras.

The 1080p23.98 format, for example, can be converted using 3:2 pull-down to 1080i59.94 right inside the camera. A similar effect is available through frame repeats for the 720p formats at lower frame rates. For example, the 720p23.98 format can generate 720p59.94 format and the 720p25 format can generate 720p50.

For 24p productions, the WorldCam makes slow motion at 2.5X speeds possible. Material acquired in the 720p59.94 format, will provide 2.5X slow motion when the 59.94 Hz recording is played back at 23.98 Hz.

Convenient Assist Tools Speed Production

The LDK 6000 mk II includes a number of features to speed the production process, from focus-assist tools to smart cards.

For precise focusing, which is especially crucial in the high-resolution HD environment, the camera includes a patented "crawler" that creates a motion effect on the edges of an object in sharp focus; the contrasting motion helps a camera operator fine tune that focus quickly. The camera also features a unique electronic viewfinder zoom function that instantly enlarges an image with a simple press of a button; it's ideal for focusing on small details.

It's also easy to pre-configure the LDK 6000 mk II for a variety of different settings—from sports and drama applications to studio settings—by storing operational and image settings on low-cost smart cards. Not only can the camera recall these settings quickly, you can transfer the cards between cameras for fast reconfiguration.

Choose Your Transmission System

Designed to support the widest array of applications possible, the LDK 6000 mk II integrates with the Grass Valley TriaxHD and FiberHD transmission systems.

The sophisticated Grass Valley TriaxHD transmission system is the next step in the evolution of the Emmy-award winning triax transmission system. By interfacing with industry-standard triax cabling, the TriaxHD system offers the robustness and reliability of the medium and its connectors, a cost-effective way to reuse existing cable inventories.

The TriaxHD system supports cable lengths of up to 3,300 feet/1,000 meters without significant loss of signal quality.

For longer cable runs, the Grass Valley FiberHD transmission uses standard hybrid cable. Using it requires a simple adapter change on the LDK 6000 mk II and a quick replacement of the triax boards inside the camera's base station with optional Fiber modules.

Small, Lightweight Base Station Supports Multi-Format Output

For a gradual and managed transition from SD to HD—and for maximum flexibility—the base station of the LDK 6000 mk II offers simultaneous, multi-format output. The base station is the smallest and lightest of its type.

In addition to HD, the base station supports high-quality analog and digital SDTV (NTSC/PAL and serial digital 525/625) outputs. These capabilities make it and the LDK 6000 mk II a perfect combination for SD or HD productions or SD/HD simulcasting.

What's more, with its true progressive digital cinematography formats, the LDK 6000 mk II WorldCam can address applications such as episodics or sitcoms, which often require the special motion portrayal of dedicated digital cinematography cameras.

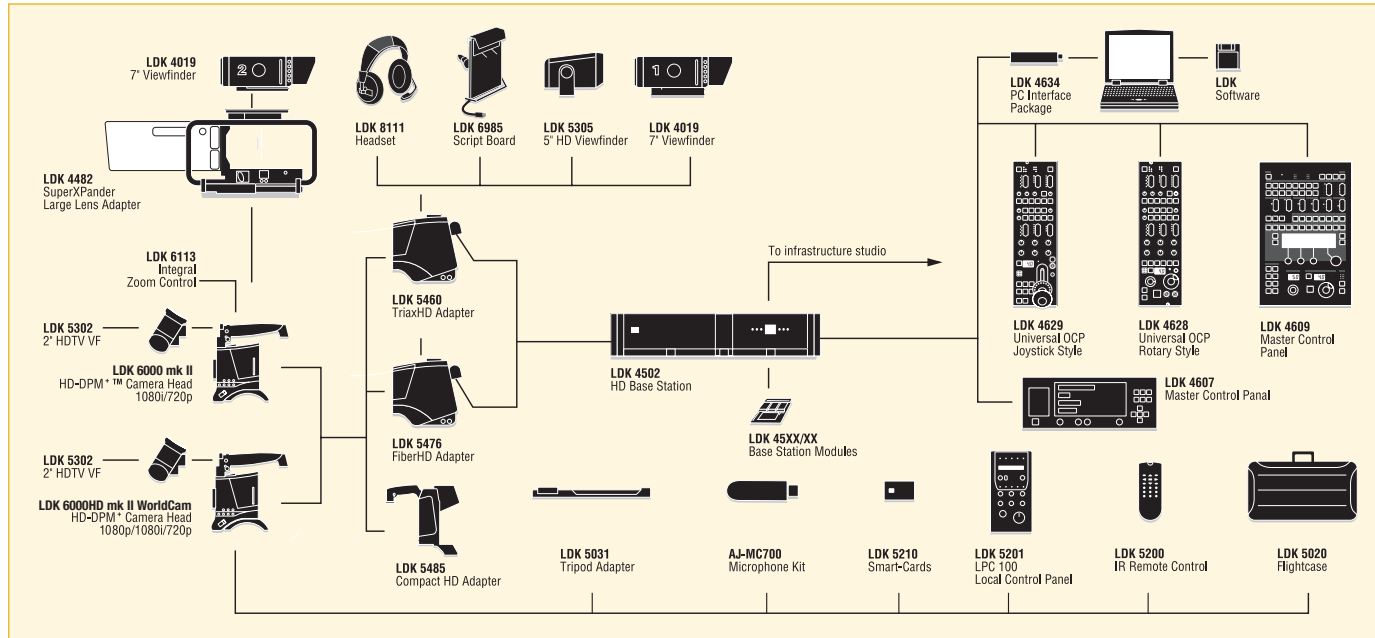### Lightweight, Ergonomic Design Ensures Comfort

The LDK 6000 mk II features a lightweight, balanced design for maximum comfort and freedom of movement. A magnesium-alloy body provides a high degree of durability, yet helps keep the camera the lightest in its class. An optional zoom-control on the top handle makes awkward ground-level shooting easier, while a rotary TriaxHD connector ensures that its cable does not get in the way.

Flexible and Future Proof

The LDK 6000 mk II was designed for flexibility and cost-effective compatibility. Its docking concept, for example, makes it suitable for all applications. And its HD base station is easy to integrate into a mobile field production facility.

The lightweight LDK 6000 mk II is also perfectly suitable for hand-held operations. Alternatively, with the optional Grass Valley SuperXPander or large lens adapter and an optional seven-inch HD high-resolution viewfinder, users can turn the camera into a fully featured studio head in triax mode. The optional compact HD adapter provides 1.5 Gb/s HD-SDI output. By adding an LDK 5201 local control panel and an HD recorder, you can also create a cost-effective basic configuration for HD acquisition in the field.

Camera Configurations LDK 6000 series

Diagram labels:
- LDK 4019 7" Viewfinder
- LDK 4482 SuperXPander Large Lens Adapter
- LDK 6113 Integral Zoom Control
- LDK 5302 2" HDTV VF
- LDK 6000 mk II HD-DPM+™ Camera Head 1080i/720p
- LDK 5302 2" HDTV VF
- LDK 6000HD mk II WorldCam HD-DPM+ Camera Head 1080p/1080i/720p
- LDK 8111 Headset
- LDK 6985 Script Board
- LDK 5305 5" HD Viewfinder
- LDK 4019 7" Viewfinder
- LDK 5460 TriaxHD Adapter
- LDK 5476 FiberHD Adapter
- LDK 5485 Compact HD Adapter
- To infrastructure studio
- LDK 4502 HD Base Station
- LDK 45XX/XX Base Station Modules
- LDK 5031 Tripod Adapter
- AJ-MC700 Microphone Kit
- LDK 5210 Smart-Cards
- LDK 4634 PC Interface Package
- LDK Software
- LDK 4629 Universal OCP Joystick Style
- LDK 4628 Universal OCP Rotary Style
- LDK 4609 Master Control Panel
- LDK 4607 Master Control Panel
- LDK 5201 LPC 100 Local Control Panel
- LDK 5200 IR Remote Control
- LDK 5020 Flightcase

LDK 6000 mk II Series Camera Specifications

LDK 6000 mk II Camera Head

General
This specification is valid for an operational system under normal conditions.

Power Requirements: Triax powered or DC 12V

Power Consumption: 44W incl. 2" viewfinder and TriaxHD adapter

Operating Temperature: –20°C to 45°C (–4°F to 113°F)

Storage Temperature: –20°C to 60°C (–4°F to 140°F)

Weight:
- 4.3 kg (9.6 lbs.) incl. 2" viewfinder and compact adapter
- 5.0 kg (11 lbs.) incl. 2" viewfinder and TriaxHD adapter

Dimensions:
- 213 (H) x 162 (W) x 253 (L) in mm with Compact adapter
- 205 (H) x 125 (W)x 357 (L) in mm with TriaxHD adapter

TriaxHD Cable Length: Y/Cr/Cb transmission over 1,000 m (3,300 ft.) with 14 mm cable

Viewfinder CRT:

2" Viewfinder Resolution: >600 TV lines (center)

5" Viewfinder Resolution: >650 TV lines (center)

7" Viewfinder Resolution: >800 TV lines (center)

Camera Section
Pick-up Device: 3x 2/3" HD-DPM+ CCDs, two versions:
- Standard: 1080i/720p switchable
- WorldCam: 1080p/1080i/720p switchable

Picture Elements: 9.2 million pixels 1920 (H) x 4320 (V) effective

HDTV Aspect Ratio: 16:9

Temporal Freq.'s Standard: 50 and 59.94 Hz

Temporal Freq.'s WorldCam:
- 1080p(sf): 23.98, 24, 25, 29.97 fps
- 1080p: 23.98 fps with employed 3:2 pull-down available as: 1080i59.94
- 720p: 23.98, 25, 29.97 fps with employed 2:2/3:2 frame repeat available as respectively: 59.94, 50, 59.94 Hz
- 1080i/720p: 50, 59.94 Hz

Smear: No vertical smear

Optical System: F1.4 prism system

Optical Filters on First Wheel: Clear, 1/4 ND, 1/16 ND, 1/64 ND

Optical Filters on Second Wheel: Clear, four-point star, six-point star, soft-focus

Electronic Filters: 3200 K, 5600 K, 7500 K, FL, 2 AWB presets, Continuous Auto White, Color Filter

Digital Quantisation: 12-bits A-to-D

Digital Signal Processing: > 22-bits

Sensitivity: 2000 lux at F8.0 (typical, 1080i59.94 mode)

Gain: -3 dB to +12 dB in 3 dB steps (user definable presets)

S/N Ratio: 55 dB in Y (typical)

Modulation Depth: 55% at 27 MHz (typical, 720p mode)

Exposure Control: Down to 1/1000 sec (23.98 Hz and 24 fps: down to 1/200 sec)

Clean Scanning:
- 50.8 to 125 Hz (at 50 Hz temp. freq.)
- 61 to 150 Hz (at 59.94 Hz temp. freq.)

Front Microphone In: 1x XLR-3 female, balanced, +48V, CH1 on HD Base Station

Viewfinder Out: 20-pin connector

Lens: 12-pin connector

Control input: 9-pin, RS-232 compatible

LDK 5460 TriaxHD Adapter
TriaxHD: Trilock, Fischer, ARD or Lemo

Video CVBS Out: BNC 1x, 1.0 Vp-p, 75Ω; NTSC or PAL (viewing quality, not in all frame rates)

Monitor Out: BNC 1x, Y-signal of viewfinder or external video, 1.0 Vp-p, 75Ω

Teleprompter Out: BNC 1x, 1.0 Vp-p, 75Ω

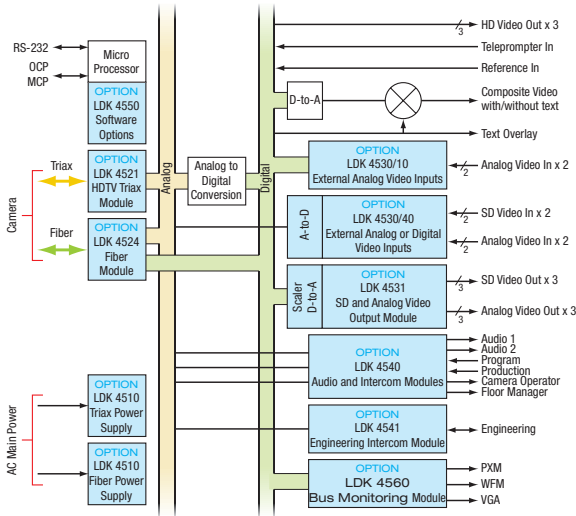**Rear Microphone In (2x):** 2x XLR-3 female, balanced, +48V selectable

DC 12 Volts In: XLR-4 male

DC Out: 12 Volts, 1.5 Amps, 4-pin Hirose (DC out and Tally indication)

Scriptlight: 12 Volts, 0.25 Amps, 3-pin Fischer

LDK 6000 mk II Base Station:

The base station of the LDK 6000 mk II is the smallest and lightest of its type and provides HD, digital SD (NTSC/PAL and serial digital 525/625) outputs, making it perfect for SD or HD productions or SD/HD simulcasting.

Block diagram:

- RS-232
- OCP
- MCP
- Micro Processor
- OPTION LDK 4550 Software Options
- Triax — OPTION LDK 4521 HDTV Triax Module
- Fiber — OPTION LDK 4524 Fiber Module
- Camera
- Analog to Digital Conversion
- Analog / Digital
- D-to-A
- HD Video Out x 3
- Teleprompter In
- Reference In
- Composite Video with/without text
- Text Overlay
- OPTION LDK 4530/10 External Analog Video Inputs — Analog Video In x 2
- A-to-D
- OPTION LDK 4530/40 External Analog or Digital Video Inputs — SD Video In x 2, Analog Video In x 2
- Scaler D-to-A
- OPTION LDK 4531 SD and Analog Video Output Module — SD Video Out x 3, Analog Video Out x 3
- OPTION LDK 4540 Audio and Intercom Modules — Audio 1, Audio 2, Program, Production, Camera Operator, Floor Manager
- OPTION LDK 4541 Engineering Intercom Module — Engineering
- OPTION LDK 4560 Bus Monitoring Module — PXM, WFM, VGA
- AC Main Power
- OPTION LDK 4510 Triax Power Supply
- OPTION LDK 4510 Fiber Power Supply

Tracker: 11-pin Fischer (Comm./Signaling)

Auxiliary/Data: 11-pin (Private data)

Intercom: 1x XLR-5 female or Tuchel, with channels for Eng/Prod/Program

LDK 5476/20 Fiber Adapter

Hybrid Fiber: Connector acc. SMPTE

Video CVBS Out: BNC 1x, 1.0 Vp-p, 75Ω; NTSC or PAL (viewing quality, not in all frame rates)

Monitor Out: BNC 1x, Y-signal of viewfinder or external video, 1.0 Vp-p, 75Ω

Teleprompter Out: BNC 1x, 1.0 Vp-p, 75Ω

Rear microphone In (2x): 2x XLR-3 female, balanced, +48V selectable

DC 12 Volts In: XLR-4 male

DC Out: 12 Volts, 1.5 Amps, 4-pin Hirose (DC out and Tally indication)

Scriptlight: 12 Volts, 0.25 Amps, 3-pin Fischer

Tracker: 11-pin Fischer (Comm./Signaling)

Auxiliary/Data: 11-pin (Private data)

Intercom: 1x XLR-5 female or Tuchel, with channels for Eng/Prod/Program

LDK 5485 Compact HD Adapter

Video HD SDI Out: BNC 3x, SMPTE 292M, 0.8 Vp-p, 75Ω, 1.5 Gb/s

Video CVBS Out: BNC 1x, 1.0 Vp-p, 75Ω; NTSC or PAL (viewing quality, not in all frame rates)

Viewfinder CVBS out: BNC 1x 1.0 Vp-p 75Ω NTSC or PAL

Genlock In: HD tri-level sync., 0.6 Vp-p, 75Ω on 26p VTR, blackburst

DC 12 Volts In: XLR-4 male

DC 12V Out: Hirose 4p female

Control: Hirose 12p female with RS 232 for LCP 100

HD Multicore: D&H 26p male with 3x HD SDI out, Audio out, Battery in, Sensing out, VTR Start/Stop out, Tally in, Play back Video in, CVBS out, Ref in, Control 232

Optional

LDK 5302 2" HD Viewfinder

LDK 5305 5" HD Viewfinder

LDK 4019 7" HD Viewfinder

LDK 4482 SuperXpander Large Lens Adapter

LDK 5031 Tripod adapter plate

LDK 6113 Integral zoom control in handgrip

LDK 6985 Script board with light

AJ-MC700 Microphone kit

LDK 5210 Set of 10 user cards

LDK 5220 Smart-Touch™ Software

LDK 5200 IR remote control

LDK 5020 Flight case

LDK 8275/01 HD multicore break-out box

LDK 8175/01 HD multicore cable 10m

LDK 8175/04 HD multicore cable 40m

LDK 8175/11 HD multicore cable 10m light version. (LV)

Note: with LV the following functionality is available on the the brak-out box, 2x HD SDI out, Battery in, Sensing out, Tally in, VTR Start/Stop out

LDK 8175/14 HD multicore cable 40m

Supplied Accessories

- Operator's Manuals
- Rain cover camera
- 1x Owner card
- Shoulder strap camera
- 2x User cards

LDK 6000 mk II Base Station Specifications

LDK 4502SL HD Base Station

General

Dimensions (WxHxD): 438 (19" rack) x 88 (2 RU) x 510 mm (17.2 x 3.5 x 20.1 inches)

Operating Temperature: –0°C to +50°C (–4°F to 122°F)

Storage Temperature: –40°C to +70°C (–40°F to 158°F)

Operating Humidity: Max. 90% (noncondensing)

Shock Resistance: Max. 10G (transport), Max. 2G (operating)

Altitude: Max. 50,000 ft.

Weight: 17.0 kg (37.5 lbs.) fully equipped with options

Transmission
Typical Cable Length With:
- Triax 14 mm/0.55" 1000m (3,281 ft.)
- Hybrid Fiber acc SMPTE 311 4000m (13,124 ft.)
- Bandwidth 30/15/15 MHz (Y/Cr/Cb)

Connectors
Teleprompter In: BNC 1x (and loopthrough output), 1.0 Vp-p, 75Ω

Reference In:
- BNC 1x (and loopthrough output), 1.0 Vp-p, 75Ω
- HD tri-level sync or SD Black Burst

HD-SDI Out: BNC 3x, 0.8 Vp-p, 75Ω, SMPTE 292M, 1080i or 720p at 59.94 or 50 Hz

Text Out: BNC 1x, 1.0 Vp-p, 75Ω (VBS)

Composite Video Out: BNC 1x, 1.0 Vp-p, 75Ω (CVBS, w/ or w/o text; for viewing purposes only)
- NTSC acc. SMPTE 170M
- PAL acc. ITU 624

Signaling In/Out: D-sub 15-pin, male
- Preview, Green tally (call), dry contact,
- Yellow tally (ISO), dry contact,
- Red tally (on-air), dry contact
- Remote audio level control (22-64 dB), DC

Auxiliary In/Out – D-sub 9-pin, Female
- An0, 0-5 VDC in, output on camera head
- An1, 0-5 VDC in, or aspect ratio remote control,
- 16:9 <0.8 VDC in, 4:3 >2.4 VDC in
- Private data in out, 2.4 kB TTL (RS-232)

RS-232: D-sub 9-pin, male (RXD, TXD, DTR, DSR, RTS, CTS)

Control Data: Series 9000, 4-pin male, 2 wire camera control - Ethernet, IEEE 802.3 10/100 Mb

LDK 4510/10 Triax AC/DC Power Module for Studio and Portable Camera Heads
Power Requirement: AC 115V/ 230V ±15%, 47 to 63 Hz

Power Connector: IEC type, 3-pin male

Power Consumption:
- 470 VA or 270 Watts max. (with studio camera head)
- 360 VA or 210 Watts max. (with port. camera head)

Utility Power:
- 150 VA or 150 Watts max. (on studio camera head or LLA)
- 80 VA or 80 Watts max. (on port. camera head)

LDK 4510/40 Fiber AC/DC
Power Requirement: -AC 115V/ 230V ±15%, 47 to 63 Hz

Power Connector: IEC type, 3-pin male

Power Consumption:
- 470 VA or 270 Watts max. (with studio camera head)
- 360 VA or 210 Watts max. (with port. camera head)

Utility Power:
- 90VA (on SuperXpander)
- 18 VA (on port. camera head)

Transmission Modules
LDK 4521 Triax Modules
LDK 4521/10 TriaxHD Module with Fischer triax connector

LDK 4521/20 TriaxHD Module with Tri-Lock triax connector

LDK 4521/30 TriaxHD Module with ARD triax connector

LDK 4521/40 TriaxHD Module with Lemo 4 triax connector

LDK 4521/50 TriaxHD Module with Lemo BBC triax connector

LDK 4521/60 TriaxHD Module with Lemo 3 triax connector

LDK 4524 Fiber Modules
LDK 4524/20 Fiber HD Module with Lemo hybrid connector according to SMPTE 304

External Video Input Module
LDK 4530/10 Analog Video Input Module
External Video In: BNC 2x, 1.0 Vp-p, ±6 dB, 75Ω (loopthrough) (CVBS or VBS)

LDK 4530/40 Digital or Analog Video Input Module
Switchable in Base Station Menu
- Digital in BNC 2x passive loopthrough
- Video standard, acc SMPTE 259M
- Input cable length 250m max., Belden 1694 or eq.
- Loopthrough equivalent with 50m Belden 1694 or eq. in total 5x loop through max., last one loaded with 75Ω
- Delay compensation 9 µs max., adjustable in base station menu
- Bandwith (out on PXM/WFM) 0.1-5 MHz 0-0.5/1 dB
- K ratings <2%
- Prepared for Video Index Information Coding
- 525 line TV acc ANSI/SMPTE 125
- 625 line TV acc. ANSI/SMPTE 267
- Analog in BNC 2x, 1.0 Vp-p ±6 dB, 75Ω (loop through) CVBS or VBS

LDK 4531/20 SDTV Output Module
SDI Out: BNC 3x, 0.8 Vp-p, 75Ω, SMPTE 259M, ITU-R BT.601

Analog Out: BNC 3x, R, G, B or Y, Pr, Pb, or 3x CVBS (menu selection):
- RGB out: 3x 0.7 Vp-p (±1%), 75Ω
- Y, Pr, Pb: 3x 0.7 Vp-p (±1%), 75Ω
- CVBS out: 3x 1.0 Vp-p (±1%), 75Ω

Frequency Response: 0.1 to 6 MHz (+0.5 dB/-1 dB)

K Factor: Less than 2%

LDK 4540/10 2 Ch. Audio & 2/4-wire Intercom
Audio Out: XLR-3 2x, 0/+6dBu (±1.5 dB, max. 18 dBu, 600Ω, Gain Max. 70 dB)

Frequency Response: 40 Hz to 15 kHz, (+1/–3 dB, 1 kHz, –10 dBu output level)

Distortion: Less than 0.5% (100 Hz/ 1 kHz, +6 dBu out, 600Ω)

S/N Ratio: 58 dB (unweighted RMS)

Intercom In/Out: D-sub 15-pin, female (program in, production in/out, engineering in/out, 2/4 wire in: 0 or 6 dBu (max. 6 or 12 dBu), 9 kΩ, out: 0 or 6 dBu (±2 dB, max 12 dBu), 600Ω

Frequency Response: 150 Hz to 6 kHz (1 kHz, –10 dBu output level)

Distortion: Less than 2% (1 kHz, +12 dBu level)

LDK 4541 Engineering Intercom Module
LDK 4541/10 XLR-5 (female) engineering intercom module

LDK 4541/20 Tuchel 6-pin engineering intercom module

LDK 4541/30 Tuchel 5-pin engineering intercom module

LDK 4541/40 XLR-7 (female) engineering intercom module (6 dBu, ±2 dB, max 12 dBu, 25-400Ω)

Frequency Response: 150 Hz to 6 kHz, ±3 dB (0 dB, 1 kHz, -10 dBu output level)

S/N Ratio: 46 dB (unweighted RMS)

Phantom Power: +12 V (±1V), menu selectable

LDK 4560/20 Monitoring Module (with WFM, PXM and Analog HDTV Output)
PXM Video Out: BNC 1x, 1.0 Vp-p, 75Ω, SMPTE 274M or SMPTE 296M (depending on acquisition format); R,G,B or Y (menu selection) with HD tri-level sync

WFM Video Out: BNC 1x, 1.0 Vp-p, 75Ω, SMPTE 274M or SMPTE 296M (depending on acquisition format); R,G,B or Y (menu selection) with HD tri-level sync

Analog HDTV Out: VGA-type D-connector, 15-pin, female, with RGB, H-sync, and V-sync

Frequency Response: 0.1 to 30 MHz (+0.5 dB/–1dB)

Customer Service Commitment

The Thomson Broadcast & Media Solutions Service Team delivers complete service solutions that enhance our line of Grass Valley products. Let our experienced professional staff help you build a state-of-the art network and deliver the best content possible for your advertisers and viewers.

Our suite of SupportPRO Services provides support throughout the product life cycles:

- Networking and consulting services
- StartPRO and on-site support
- Preventative maintenance packages
- Training and educational programs
- Technical support services and centers
- Parts, kits and repair services
- Support agreement
  - TechPRO all-inclusive package with software, hardware and on-site support coverage
  - ServicePRO semi-inclusive with software and part coverage
  - PartsPRO with advance exchange of parts only
- Software and documentation

For more information contact Service Sales in your region or visit us online at www.thomsongrassvalley.com/support.

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