



## LDX Cameras

TOP  
REASONS  
TO BUY



The LDX Series, LDX HiSpeed and LDX XtremeSpeed system cameras from Grass Valley, a Belden Brand, are available with different levels of feature sets, format support and physical size, with an easy upgrade path between different cameras within the model line. LDX cameras incorporate a new generation of camera imagers and signal processing which guarantees cutting-edge image performance.

Multiple transmission solutions, with the unique cradle concept of the XCU base stations, offer the highest performance and flexibility in signal transmission. With the addition of the LDX Compact series, the full performance of the LDX Series is now available for all applications where cameras with a smaller form factor are required.

## 1. Full range of 11 LDX cameras for the ultimate in production flexibility

- **LDX Series** consisting of the single-format LDX Flex (1080i50/59.94 or 720p50/59.94 — selected at time of purchase), LDX Première (1080i50/59.94 & 720p50/59.94), LDX Elite (1080PsF23.98/24/25/29.97, 1080i50/59.94 & 720p50/59.94), and LDX WorldCam (1080p50/59.94, 1080PsF23.98/24/25/29.97, 1080i50/59.94 & 720p50/59.94) models.
- **LDX Compact** series consisting of the LDX Compact Première (1080i50/59.94 & 720p50/59.94), LDX Compact Elite (1080PsF23.98/24/25/29.97, 1080i50/59.94 & 720p50/59.94), and LDX Compact WorldCam (1080p50/59.94, 1080PsF23.98/24/25/29.97, 1080i50/59.94 & 720p50/59.94) — offering the same outstanding level of performance and operational excellence as the LDX Series.
- **LDX HiSpeed & LDX Compact HiSpeed** 3X super slow-motion camera (1080i50/59.94/150/179.82 & 720p50/59.94/150/179.82\*), upgradable to the LDX XtremeSpeed 6X ultra slow-motion camera.
- **LDX XtremeSpeed & LDX Compact XtremeSpeed** 6X ultra slow-motion camera (1080p50/59.94/150/179.82, 1080i50/59.94/150/179.82/300/359.64 & 720p50/59.94/150/179.82/300/359.64\*).

With the latest addition of two high-speed capable camera systems, the LDX range offers the most flexible and complete imaging solutions from standard speed through 3X speed (super slow-motion) and up to 6X speed (ultra slow-motion).

*\*Note: The 1X single-speed “live” output is currently available with all high-speed cameras. The full performance 1X single-speed operation (Elite & WorldCam features) will become available by a software update in H2/2014.*

## 2. Superior Image Performance

- Using leading-edge imaging technology in combination with superior processing features, the LDX Series produces the best image quality with the highest sensitivity available on the market.
- With lossless format switching to 1080p formats, LDX offers the same sensitivity and dynamic range as with 1080i formats — a clear improvement over any previously available camera system.

The high level of sensitivity and dynamic range in all the different formats will guarantee the best possible results even under the most challenging lighting conditions and with the lowest lighting requirements, resulting in lower energy costs for studio cooling.

## 3. A Unique Level of Business Flexibility

- A single platform with a clear upgrade path, offering a future-proof, cost-efficient solution for all type of applications.
- Perpetual and 7-day upgradable software licensing (GV-eLicense) is available for the ultimate in production flexibility.
- With GV-eLicensing, any basic standard speed LDX camera model can be easily upgraded into any more advanced standard speed model. (See #8 below for information on high-speed LDX camera system upgrades.)
- With the B.O.W.L. licensing option (simply, a bunch of weekly licenses), users can also preorder any number of 7-day term GV-eLicenses and easily activate them when needed.

The LDX Series software upgrade system allows for the lowest possible investment cost (CAPEX) but still offers the flexibility to satisfy different demands through software feature upgrades when needed (OPEX).

## 4. Unmatched Level of Operational Excellence

- Many operational features and implementations that make using the camera easier — even for untrained users.
- An ergonomic button layout and streamlined menu structures that are optimized for various user types.
- Smart coupling between functions allows for the best possible image quality with the lowest possible amount of user interaction.
- A side grip is standard with LDX Première, LDX Elite, LDX WorldCam, LDX HiSpeed and LDX XtremeSpeed. The new ComfortPad (an option for all LDX Series, LDX HiSpeed and LDX XtremeSpeed cameras) offers a flexible ergonomically designed alternative to the traditional shoulder pad to accommodate different body types.

The outstanding level of operational features make the camera extremely user friendly. Best possible results can be expected even during the most demanding applications. Operating costs are more easily managed as it is easy to find creative users who will be comfortable with the operational aspects of the LDX Series.

## 5. Complete Imaging Solutions

- With the PickMe button for camera shot area of interest, scene direct function, and digital tally control, the LDX Series is the perfect choice for a wide variety of live event applications.
- More touch points and control mechanisms can be accessed through the camera Connect Gateway for various user requirements, including third-party integration.

The LDX camera system offers a unique level of integration into the total production environment. This provides savings in setup time and operation, and also reduces potential errors caused by incorrect camera settings.

## 6. Adaptable Camera Head with Transmission Flexibility

- Small and lightweight camera heads contain only optical pickup and digital image processing electronics.
- Flexible Grass Valley 3G Transmission systems offer fully future-proof and cable-independent transmission solutions for all LDX Series system cameras. With base stations offering both triax and fiber connectivity and a wide range of field converter boxes, any combination of triax and fiber cables can be used without limitation of the camera feature set and/or format support in all 1.5G and 3G HD formats.
- The XCU camera base station contains the full feature set of Grass Valley transmission solutions in 2 RU for the limited space aboard OB vans. It features a unique fixed cradle implementation, so that the base station is dockable and can be easily moved between locations.
- Multiple third-party providers supply a wide range of high-performance integrated wireless solutions for standard speed LDX cameras.

The camera head in combination with the outstanding flexibility of the transmission solutions maximizes the utilization of the equipment. The amount of equipment required to match various imaging applications is substantially reduced.

## 7. LDX Compact Series cameras as an extension of the LDX Series

- The compact and lightweight LDX Compact camera heads contain all the components needed for delivering the highest image performance in all HD formats including 1080p50/59.94.
- All the typical video, audio and control interfaces are directly available on the LDX Compact camera body. Several additional interfaces are available which includes a USB connector for managing GV-eLicenses, software upgrades, and for scene file management. An HDMI interface can be used for camera monitoring and as a very cost-efficient and flexible viewfinder output.
- LDX Compact offers the full performance and feature set of a high-end LDX Series system camera in a self-contained compact camera body requiring minimal space.

The LDX Compact cameras can match the same look, offer the same image performance, and have the same level of control as the rest of the LDX Series, so they provide the adaptability to be used alongside the system cameras, or work alone where only cameras with a compact form factor can be used.

## 8. LDX HiSpeed cameras are the perfect addition for super slow-motion applications

- LDX HiSpeed (LDX HS) cameras offer up to 3X speed operation in 1080i and 720p, with an additional 1X standard speed “live” output for seamless integration with the standard cameras used in a production.
- A new level of image performance for super slow-motion applications with 3X speed in all 1.5G formats at an exceptional value making it the perfect solution for live sport and entertainment productions.
- AnyLightXtreme light flicker compensation system guarantees flicker-free images even under the most challenging of lighting conditions.
- For production flexibility, LDX HS cameras can be switched to offer the same feature set and to use the same video formats of an LDX Elite camera, with the exception of PsF formats.
- The LDX HS can be upgraded via GV-eLicenses for either a 7-day or perpetual period to LDX XtremeSpeed (6X speed).

The LDX HiSpeed cameras can match the same look, offer the same level of image performance, use most of the same accessories, and have the same control implementation as the rest of the LDX Series. This makes deployment more flexible, reduces equipment costs, and makes operational aspects simpler.

## 9. LDX XtremeSpeed cameras are the perfect addition for super slow-motion and ultra slow-motion applications

- LDX XtremeSpeed (LDX XS) cameras offer up to 6X speed operation in 1080i and 720p and 3X speed operation in 1080p, with an additional 1X standard speed “live” output for seamless integration with the standard cameras used in a production.
- The LDX XS is the first camera to offer a super slow-motion workflow with instant time-to-air where all material will be permanently recorded without losing a single moment of the action, along with higher than 3X speed functionality, making it the perfect solution for the most action-packed kinds of sport and entertainment productions.
- AnyLightXtreme light flicker compensation system guarantees flicker free images even under the most challenging of lighting conditions.
- For production flexibility, LDX XS cameras can be switched to offer the same feature set and to use the same video formats of an LDX WorldCam camera, with the exception of PsF formats.

LDX XtremeSpeed cameras can match the same look, offer the same level of image performance, use most of the same accessories and have the same control implementation as the rest of the LDX Series. This makes deployment more flexible, reduces equipment costs and makes operational aspects simpler.

## 10. LDX Compact HiSpeed and LDX Compact XtremeSpeed cameras offer unique new possibilities for high-speed image capture applications

- The LDX Compact HiSpeed (LDX Compact HS) and LDX Compact XtremeSpeed (LDX Compact XS) camera systems offer a comparable feature set as their LDX HS and LDX XS counterparts (with the exception of the AnyLightXtreme feature) but in a smaller form factor that can provide unique and diverse viewing positions that have not been previously possible in high-speed applications.
- All the connectivity is at the rear of the compact camera body and no camera base station is required.

The LDX Compact HS and LDX Compact XS cameras can match the same look, offer the same level of image performance, use most of the same accessories, and have the same control implementation as the rest of the LDX Series. This makes deployment more flexible, reduces equipment costs and makes operational aspects simpler.

## 11. All LDX high frame rate cameras work with the Grass Valley K2 Dyno Replay System

- High-speed cameras are only as good as their replay system. For a complete slow-motion acquisition system, all LDX high frame rate cameras can be fully integrated with K2 Dyno Replay Systems. K2 Dyno is the fastest way to create replays and highlight packages in especially in ultra slow-motion workflows.
- To dramatically expand the ability to tell a compelling story during replays, K2 Dyno Replay Systems include optimized AnySpeed technology to dynamically provide for the smoothest playback at any speed from 0 percent to 200 percent.

The combination of cost-effective LDX high frame rate cameras and the K2 Dyno Replay System provides the flexibility to add enhanced slow-motion acquisition at more positions to create even more compelling live production coverage.

## 12. Digital Color Correction with No Optical Filters

- The large dynamic range of the Xensium-FT imagers provides digitally managed color correction inside the camera DSP. This enables a more accurate camera response to sampled scenes and offers the same sensitivity over the full range of color temperatures, rather than the use of filters which reduces sensitivity and introduce aberrations.
- The LDX Series offers the greatest range of color flexibility by allowing operators to use either a preset color range or actual sampling of the color scene being viewed.
- Color balance can be preset or continuous auto-tracking. In continuous mode, color balance is corrected throughout the shot.

Full digital color correction allows the cameras to be more flexible and adaptable to any given lighting condition. The high sensitivity and low demands to the lighting requirements can be achieved over the full color temperature range.

## 13. Lightweight Construction

- The use of cast alloys blends strength and durability with good weight distribution. LDX camera head exterior parts are made from cast alloy materials and provide durable construction while remaining lightweight.
- Access points include seals around all edges to improve robustness and to keep moisture and contamination away from sensitive electronic and optical areas.
- A variable speed zoom control — which is built into the camera's hand grip, the integrated side grip (not available with LDX Flex) and the optional ComfortPad — provides the best possible use under difficult shooting conditions.

The robust construction of the LDX camera system offers for the best possible stability over the full life cycle of the camera. Total cost of ownership is reduced with very low maintenance costs for possible mechanical or electrical failures.



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