

HDC-3500RV

2/3-inch 4K 3-CMOS sensor portable system camera with pre-installed variable ND filter



Overview

Expand your creative horizons with the HDC-3500RV, offering smooth handling and precise shooting for simultaneous HDR and SDR production. The HDC-3500RV also features Extended Dynamic Range* and Multi Sensitivity Modes for flexible operation in challenging lighting conditions. This 2/3-inch 4K 3-CMOS image sensor portable system camera delivers 4K output** with outstanding image quality and an impressive S/N ratio. It also supports wireless operation, with a choice of optional outside panels for added versatility.

* Feature name subject to change.

** Optional software or hardware is required.

Features

Imaging Power Unleashed

The high-performance 2/3-inch 4K 3-CMOS image sensor at the heart of the HDC-3500RV achieves extremely high sensitivity with an impressive signal-to-noise ratio of 64 dB. Sony's class-leading Global Shutter Technology eliminates rolling shutter distortion and the risk of banding under artificial light, allowing the HDC-3500RV to capture stable, precise 4K (UHD) images even with fast-moving subjects.

Extended Dynamic Range and Multi Sensitivity Mode*

Wider dynamic range captures reduce highlight clipping, delivering richer detail and improved expression in high contrast scenes such as music concerts and outdoor sports. The Multi Sensitivity Mode additionally enables switching between multiple predefined sensitivity profiles while maintaining a high S/N ratio, ensuring consistent image quality as lighting conditions change.

* Availability: planned via software update in December 2026 or later.

Wide Colour Space

The HDC-3500RV supports wide colour spaces including ITU-R BT.2020, S-Gamut3, and S-Gamut3.Cine, as well as SG3 (LIVE GRADE) and SG3.Cine (LIVE GRADE), for HDR and cinematic workflows.

Pre-installed Variable ND Filter

Seamless ND filter switching without any visible physical filters. This allows for smooth transitions between different lighting conditions without any disruption to the broadcast. Additionally, the system supports high frame rates (HFR) and is switchable between deep/shallow depth of field, making it well-suited to sports applications where capturing fast-paced action and dramatic shots is essential. The variable ND filter is pre-installed, allowing for smooth exposure adjustments without affecting image quality.

The VND unit is equipped with two types of special filters: the Extra OLPF reduces moiré when capturing LED screens, and the Black Mist filter creates a blurred effect, diffusing soft light onto the subject and diffusing light sources and highlights to give the image a fantastical feel.

Simplified Brightness and Depth of Field Control

Take complete control over your exposure settings with the camera system's Virtual Iris, enabling effortless adjustments to brightness between lens iris, variable ND, or master gain using a single joystick. Capture stunning visuals in any lighting condition with precise and seamless control, while taking advantage of the intuitive and user-friendly interface. Additionally, the DoF control feature allows you to freely adjust depth of field through aperture operation, maintaining brightness while achieving beautiful bokeh tailored to your scene.

HD 4x HFR Capability

When used with HDCU-3000 Series, the HDC-3500RV supports HD 4x*. For live sports, HD HFR delivers smooth slow motion that reveals every critical moment.

* Optional software or hardware is required.

Video Trunk

Simplifies system design by reducing cabling while enabling flexible integration of HD HDR or dual interlaced signals—supporting efficient and future-ready production workflows.

Multiple Prompter Line

A Multiple Prompter Line provides dedicated SDI return paths between the camera and CCU for teleprompter feeds, floor-monitor signals, or AR/virtual-studio graphics over existing cabling. It supports flexible configurations, ensuring stable, low-latency delivery for live and studio productions.

Network Trunk

The HDC-3500RV features high-speed data transmission with Network Trunk(via LAN port), supporting up to 1 Gbps.

Rich Focus Assist

The Viewfinder Detail function adds dedicated image-enhancing edge signals directly to the viewfinder, helping the operator to focus quickly and precisely in any shooting situation. It's complemented by a Focus Assist Indicator and advanced Focus Position Meter function. A Dynamic Contrast setting can also enhance the visibility of subjects in low-light areas on the VF, making framing and focusing easier in dark situations.

3D LUT Control

When used with the HDCU-3500 Series and the optional HKCU-LUT35, the HDC-3500RV provides 3D LUT functionality to streamline colour management across the camera system. LUTs can be recalled with scene files.

Pre-installed VF Slide

With the pre-installed viewfinder slide mechanism, camera operators can improve shooting comfort by minimising their body movements during panning.

This feature is especially useful in cramped spaces like tracked dollies, stadium platforms, and scaffolding, where limited mobility can hinder the desired shots. The pre-installed slide mechanism enhances shooting flexibility and usability, with a smoothly-sliding viewfinder that can be moved closer to the axis of tripod rotation to reduce changes in the viewing angle.

Unified Intercom Panel

The integrated design of the intercom panel boasts controllable PGM3, TRACKER VR, and earphone MIC across all models, ensuring a consistent layout for customers worldwide. The controllable settings include PROD/ENG/OFF, while TRACKER and PGM3 can be easily assigned to different functions.

IP Remote Production

Adding the optional HDCE-TX50/TX30 IP camera extension adaptor allows the HDC-3500RV to output ST 2110 signals* without requiring a separate CCU (Camera

Control Unit), simplifying connection to IP-based remote production systems and supporting visually lossless JPEG XS capability*.

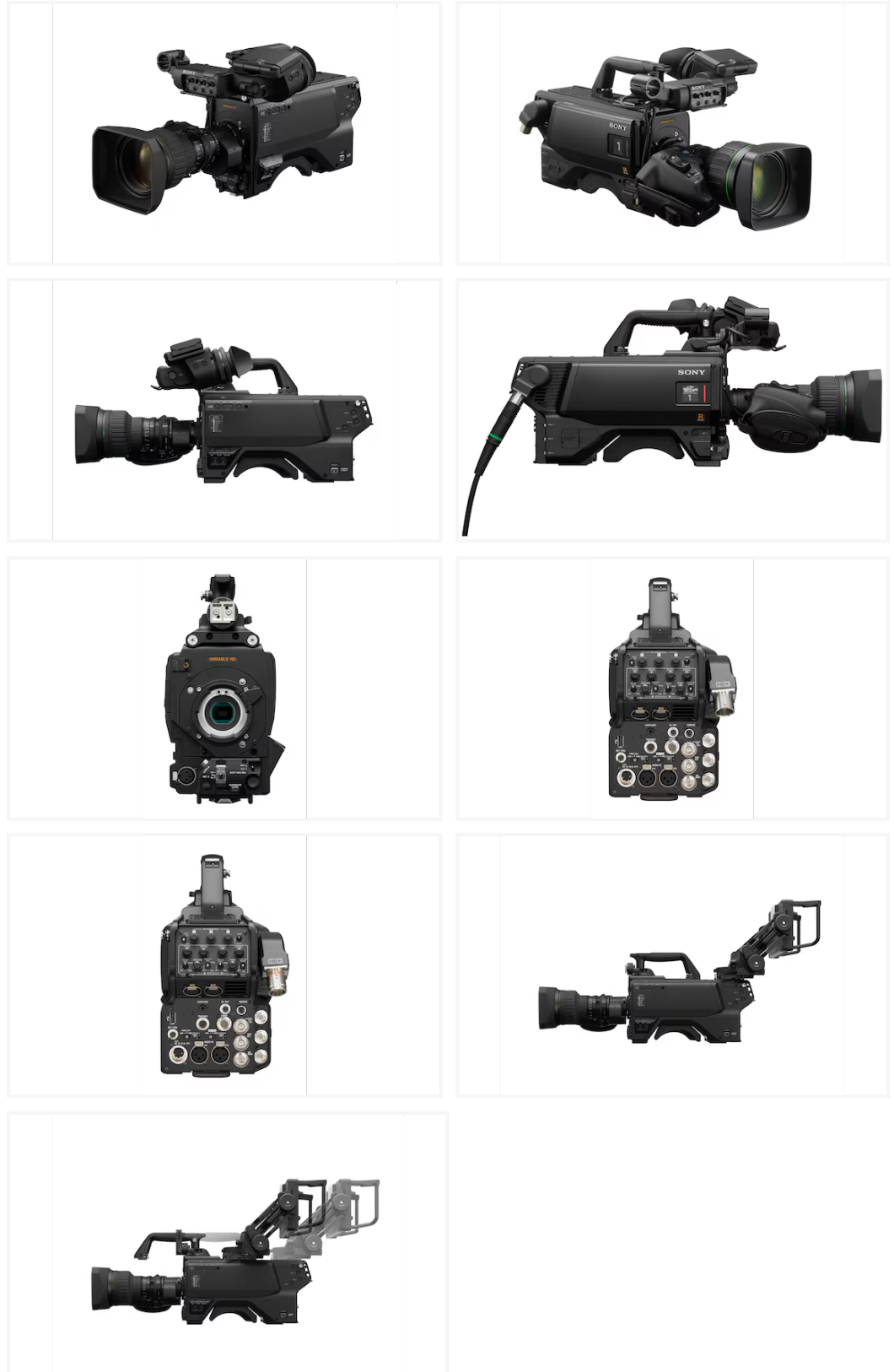
* Optional software or hardware is required.

Simultaneous HDR and SDR Production

The HDC-3500RV can capture High Dynamic Range images, supporting Sony's SR Live workflow for simultaneous HDR/SDR production with reduced inventory requirements.

This product contains pre-installed software and requires the purchase of license keys to activate some functions.

Gallery



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