CR-N500
REMOTE CAMERA

VIVID 4K
AT YOUR FINGERTIPS

Canon's CR-N500 4K UHD PTZ camera produces exceptional image quality and is equipped with powerful features and functions to be utilized in many industries including House of Worship, Education, Broadcast, Corporate, Events and more.

The CR-N500 produces incredible image quality with the combination of a 1" 4K CMOS sensor, DIGIC DV 6 image processor and 15x optical zoom 4K UHD lens. These core components provide the image-processing power and speed that enables 4K UHD video acquisition, image stabilization and precise Dual Pixel CMOS AF. On-air pan and tilt movement is possible thanks to the smooth and responsive pan and tilt mechanism equipped with the CR-N500.

The CR-N500 camera supports Canon's new XC Protocol as well as RTMP, NDI®|HX Live Video Production Protocol, Standard Protocol, SRT, FreeD and more. The CR-N500 can be controlled remotely by IP, Serial, IR or wirelessly via Wi-Fi.

4K

- High Quality 4K 30P and FHD 60P Video Output
- Smooth & Responsive Pan and Tilt Control
- Seamless Integration into Canon Imaging Workflow
- Easy Integration into IP Systems
- Various Interfaces Supported for Multiple Environments
- One-Person Operation
- Auto Tracking & Auto Loop
- Three Year Warranty

HIGH QUALITY
4K 30P AND FHD 60P VIDEO OUTPUT

The CR-N500 features a Canon 1.0-inch 4K CMOS image sensor capable of 4K UHD video capture at 30P and up to 60P in Full HD, making the CR-N500 PTZ camera ideal for the remote and unobtrusive capture of professional productions.

The CR-N500's 1.0-inch sensor allows for larger photosites, resulting in stunning images with less noise in low-light situations. The larger sensor also exhibits a shallow depth of field at large apertures, producing blurred backgrounds in images, while Canon's DPAF keeps subjects in sharp focus. A nine-bladed iris also helps to produce beautiful and natural bokeh. The CR-N500's DIGIC DV 6 image processor drives the high sensitivity (1.5 lux*) and low noise performance of the camera, yielding amazing imagery in a variety of shooting conditions.

**When camera set to: (3840 × 2160 : shutter speed 1/30 sec., Frame Rate 29.97P, Gain 33.0 dB).*

ADD-ON APPLICATIONS
AUTO TRACKING AND AUTO LOOP

Install paid apps through the Add-On Applications System, and operate them within the CR-N500 without the need for an external device.

The Auto Tracking Application follows a speaker and maintains their composition in the image during presentations, lectures and other events. Thanks to its high-performance pan/tilt/zoom mechanism and the automatic tracking application, the camera can smoothly capture movements of people in video production quality.

The Auto Loop Application empowers the camera to automatically repeat pan/tilt/zoom (PTZ) staging movements ordinarily performed by camera operators during the broadcast of events, as well as in the production of TV commercials and movies. "Fade mode" adjusts the speed of the camera motions as they begin and end, enabling the automated camera system to mimic professional camerawork.

CR-N500
REMOTE CAMERA

	SPECIFICATION	PARAMETER
CAMERA	COLOR	Satin Black / Titanium White
	IMAGE SENSOR	Type 1.0 (1.0 in.) single-plate CMOS sensor Total pixels: approx. 13.40 megapixels Effective pixels: approx. 8.29 megapixels (3840 x 2160)
	LENS	f=8.3 – 124.5 mm, F/2.8 – 4.5, 15x optical zoom, 9-bladed iris diaphragm 35mm equivalent focal length: approx. 25.5 (W) – 382.5 mm (T)
	ZOOM	Optical: 15x Digital: 20x
	LENS CONFIGURATION	18 elements in 14 groups (including 2 aspheric elements)
	MINIMUM FOCUSING DISTANCE	1 cm (0.39 in.) at full wide angle, 60 cm (2.0 ft.) throughout the zoom range
	ANGLE OF VIEW	Horizontal: 73.0 (W) – 5.7° (T) Vertical: 45.2° (W) – 3.2° (T)
	SHUTTER SPEED	1/3 – 1/2000 sec. (specific values depend on the frame frequency)
	IRIS	Manual/Automatic aperture
	GAIN	-6.0 db ~ 33.0 db
	ND FILTER	Built-in (Off, 1/4, 1/16, 1/64), motor operated
	WHITE BALANCE	AUTO (AWB), Set A, Set B, preset settings (daylight: 5,600 K*, tungsten lamp: 3,200 K*), color temperature setting (2,000 K – 15,000 K), Manual **Color temperatures are given for reference purposes only.*
	FOCUS	Focus mode: Manual, AF-boosted MF, Continuous AF, Face AF, Tracking AF type: Dual Pixel CMOS AF, Contrast AF
	GAMMA	Normal1 (Standard), Normal2 (x4.0), Normal3 (BT.709), Normal4 (x5.0), Wide DR, Canon Log 3
	IMAGE STABILIZER	Optical-shift
	MIN. SUBJECT ILLUMINATION	3840 × 2160: Approx. 1.5 lux (shutter speed 1/30 sec., frame frequency 29.97P, Gain 33.0 dB) 1920 ×1080: Approx. 3 lux (shutter speed 1/60 sec., frame frequency 59.94P, Gain 33.0 dB)
	PAN AND TILT	Pan operation range: Horizontal ±170° Pan operation speed: 0.1° – 100°/sec. Tilt operation range: Vertical -30° – +90° Tilt operation speed: 0.1° – 100°/sec.

RC-IP100 REMOTE CAMERA CONTROLLER

Canon's RC-IP100 Remote Camera Controller provides IP control for up to 99 supported Canon cameras. An additional Canon camera can be controlled through the serial port. The controller is equipped with a 7" interactive touch screen and a joystick in order to pan, tilt, zoom and change camera function settings remotely. The smooth precision of the joystick allows operators to capture on-air movements with confidence.

RC-IP100 Remote Camera Controller sold separately.

	SPECIFICATION	PARAMETER
VIDEO OUTPUT FORMAT	SDI	1920 x 1080: 59.94P/59.94i, 50.00P/50.00i/25.00P, 29.97P/23.98P (4:2:2 10 bit) 1280 x 720: 59.94P, 50.00P (4:2:2 10 bit) **Same video format required for SDI and HDMI (cannot select different formats for SDI and HDMI)* **When 3840 x 2160 is selected for HDMI, video will not be outputted to SDI*
	HDMI	3840 x 2160: 29.97P, 25.00P, 23.98P (4:2:2 10 bit) 1920 x 1080: 59.94P/59.94i, 50.00P/50.00i/25.00P, 29.97P/23.98P (4:2:2 10 bit) 1280 x 720: 59.94P, 50.00P (4:2:2 10 bit) **Same video format required for SDI and HDMI (cannot select different formats for SDI and HDMI)* **When 3840 x 2160 is selected for HDMI, video will not be outputted to SDI.*
	IP	3840 x 2160: 29.97 fps, 14.99 fps, 5.00 fps (4:2:0 8 bit) 1920 x 1080: 59.94 fps, 29.97 fps, 14.99 fps, 5.00 fps (4:2:0 8 bit) 1280 x 720: 59.94 fps, 29.97 fps, 14.99 fps, 5.00 fps (4:2:0 8 bit) 640 x 360: 59.94 fps, 29.97 fps, 14.99 fps, 5.00 fps (4:2:0 8 bit) **If 59.94/50.00 Hz is selected for the frame frequency, the 3840 x 2160 format cannot be selected.* **A frame rate that exceeds the frame frequency cannot be selected.* **JPEG has one pattern fixed depending on the frame frequency (format is fixed and cannot be selected)* Resolution: 1280 x 720 When frame frequency is 59.94/50.00 Hz: 14.99 fps, when frame frequency is 23.98 Hz: 11.99 fps, when frame frequency is 29.97/25.00 Hz: 12.50 fps
	SUPPORTED VIDEO AND CONTROL PROTOCOLS	Protocol: XC Protocol, RTSP/RTP, NDI®|HX, RTMP/RTMPS, Standard Communication (Serial), Standard Communication (IP), SRT, FreeD
	NUMBER OF PRESETS	Max. 100 (including home position)
INTERFACE	COMMUNICATION CONTROL	LAN, Wi-Fi, Serial, IR
	NETWORK TERMINAL	LAN x 1, RJ45, 1000Base-T
	3G-SDI OUT TERMINAL	BNC jack (output only) x 1, 0.8 Vp-p/75 Ω, unbalanced SMPTE 424, SMPTE 425, SMPTE ST 299-2 compliant Embedded audio, Time code (VITC/LTC)
	GEN-LOCK TERMINAL	BNC jack x 1, 1.0 Vp-p/75 Ω, input only
	HDMI OUT TERMINAL	HDMI connector x 1, output only
	RS-422 TERMINAL	RJ45 connector x 1
	INPUT 1 / INPUT 2 XLR TERMINALS	INPUT (3-pin jack) (pin1: shield, pin2: hot, pin3: cold), 2 sets, balanced Sensitivity (MIC): -60 dBu (Manual volume center, full scale -18 dB)/600 Ω/Att.: 20 dB Sensitivity (LINE): +4 dBu (Manual volume center, full scale -18 dB)/1 kΩ or more Supply Voltage: 48 V DC (Bias resistance: 6.8 kΩ)
	MIC TERMINAL	φ3.5 mm stereo mini jack (unbalanced, plug-in power supported) Sensitivity (MIC): -72 dBV (Manual volume center, full scale -18 dB)/1 kΩ or more/Att.: 20 dB Sensitivity (LINE): -10 dBV (Manual volume center, full scale -18 dB)/1 kΩ or more Supply Voltage: 2.4 V DC (Bias resistance: 2.2 kΩ)
	USB TERMINAL	Type-A (USB 2.0) x 1 (service use only)
	MEDIA SLOT	microSD card slot x 1, future expansion, recording unavailable
OTHER	OPERATING ENVIRONMENT	Temperature: +32°F – +104°F (0°C – +40°C) Humidity: 10% – 90% (without condensation)
	STORAGE ENVIRONMENT	Temperature: +32°F – +104°F (0°C – +40°C) Humidity: 10% – 90% (without condensation)
	POWER SUPPLY	PoE: PoE+ power supply via LAN connector (IEEE802.3at compliant) – PoE cannot be used External power source: 24 V DC (using included AC adaptor)
	POWER CONSUMPTION	PoE+ Input: Approx. 19.6 W* max. (body only) DC Input: Approx. 18.6 W max. (body only) **Class 4 (25.5 W required) for power supply devices*
	DIMENSIONS (W X H X D)	Approx. 7.87 x 10.59 x 8.19 in. (200 x 269 x 208 mm) (excluding protrusions)
	WEIGHT	Approx. 9.04 lb. (4.1 kg) (body only)
	SUPPORTED CONTROLLERS	Hardware: RC-IP100 Software: Remote Camera Control Application

For more info: pro.usa.canon.com

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Specifications and availability subject to change without notice. Products not shown to scale. Weight and dimensions are approximate. Product shown with optional accessories. Not responsible for typographical errors.

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