

CR-N700

CLOSE THE DISTANCE WITH UNRIVALLED CLARITY

Harness the power of a 1.0-type 4K sensor and DIGIC DV7 processor with Dual Pixel AF. A 15x optical zoom (30x in Full HD) captures productions in exceptional detail, even in Night Mode. Stream 4K60P and HDR quality broadcast footage via a wide range of IP protocols.



- 4K 60P 4:2:2 10-bit Image Quality
- 1.0-inch Type CMOS sensor
- DIGIC DV7 Processor
- 15x Optical and 30x Advanced zoom
- Dual Pixel CMOS AF with EOS iTR AF X
- HDR Imagery
- Region of Interest Cropping
- Inbuilt Protocols including SRT, NDI | HX, FreeD and more
- Flexible connectivity with 12G-SDI, HDMI, IP (PoE++) and more



PRODUCT RANGE



CR-N700



CR-N500



CR-N300

CR-N700

CR-N500

CR-N300

CR-X500

CR-X300

RC-IP100

Remote Camera
Control Application

Canon

Live for the story_

TECHNICAL SPECIFICATIONS

CR-N700

CATEGORY

Model Name
Model Type
Color

CR-N700
Indoor PTZ Camera
Satin black/Titanium white

CAMERA

Image Sensor
Effective pixels
Lens

Type 1.0 (1.0 in.) single-plate CMOS sensor
approx. 8.29 megapixels (3840 x 2160)
f=8.3 – 124.5 mm, F/2.8 – 4.5, 15x optical zoom,
9-bladed iris diaphragm

Optical zoom
Digital zoom
Focal Length

1.5x optical zoom (30 x with advanced zoom)
20x digital zoom
8.3 – 124.5 mm, f/2.8 – 4.5,
35mm equivalent focal length:
approx. 25.5 (W) – 382.5 mm (T)

Angle of View

Horizontal: 73.0 (W) – 5.7° (T)
Vertical: 45.2° (W) – 3.2° (T)

Minimum Subject Illumination

Approx. 3.0 lux (with 59.94 Hz frame frequency,
1/60 sec.
shutter speed, 59.94P frame rate, and 21 dB gain)
Approx. 2.5 lux (with 50.00 Hz frame frequency,
1/50 sec.
shutter speed, 50.00P frame rate, and 21 dB gain)

Shutter Speed

1/3 – 1/2000 sec. [specific values depend on the
frame frequency and frame rate]

Iris

Manual/Automatic aperture

Gain

-6.0 dB - 36.0 dB

ND Filter

Built-in (Off, 1/4, 1/16, 1/64), motor operated

**Night Mode
(IR Cut Filter Off)**

Yes

White Balance¹

AUTO (AWB), Set A, Set B, preset settings
(daylight: 5,600 K¹, tungsten lamp: 3,200 K¹),
color temperature setting
(2,000 K – 15,000 K), Manual

Focus

Focus mode: Manual, AF-boosted MF, Continuous
AF, Face AF, Tracking
AF type: Dual Pixel CMOS AF, Contrast AF
Detection: Face Detection, Eye Detection

Minimum focusing distance

1 cm at wide end, 60 cm across entire zooming
range

Gamma

BT.709 Normal, BT.709 Wide DR, BT.709 Standard,
Canon Log 3, PQ, HLG

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.

SERVER

Video Output Format
SDI

[12G-SDI]
3840 x 2160:
59.94P/29.97P/23.98P/50.00P/25.00P (4:2:2 10 bit)
1920 x 1080:
59.94P/59.94i/29.97P/29.97PsF/23.98P/50.00P/50.00i/
25.00P/25.00PsF (4:2:2 10 bit)
1280 x 720: 59.94P/50.00P (4:2:2 10 bit)
720 x 576: 59.94i/50.00i (4:2:2 10 bit)
[3G-SDI]
1920 x 1080:
59.94P/59.94i/29.97P/23.98P/50.00P/50.00i/25.00P
(4:2:2 10 bit)
1280 x 720: 59.94P/50.00P (4:2:2 10 bit)
720 x 576: 59.94i/50.00i (4:2:2 10 bit)

HDMI

3840 x 2160:
59.94P/29.97P/23.98P/50.00P/25.00P (4:2:2 10 bit)
1920 x 1080:
59.94P/59.94i/29.97P/23.98P/50.00P/50.00i/25.00P
(4:2:2 10 bit)
1280 x 720: 59.94P/50.00P (4:2:2 10 bit)
720 x 576: 59.94i/50.00i (4:2:2 10 bit)

IP

[Frame frequency 59.94 Hz]
3840 x 2160, 1920 x 1080, 1280 x 720, 640 x 360:
59.94 fps, 29.97 fps, 14.99 fps, 5.00 fps (4:2:0 8 bit)
[Frame frequency 29.97 Hz]
3840 x 2160, 1920 x 1080, 1280 x 720, 640 x 360:
29.97 fps, 14.99 fps, 5.00 fps (4:2:0 8 bit)
[Frame frequency 50.00 Hz]
3840 x 2160, 1920 x 1080, 1280 x 720, 640 x 360:
50.00 fps, 25.00 fps, 12.50 fps, 5.00 fps (4:2:0 8 bit)

[Frame frequency 25.00 Hz]
3840 x 2160, 1920 x 1080, 1280 x 720, 640 x 360:
25.00 fps, 12.50 fps, 5.00 fps (4:2:0 8 bit)

[Frame frequency 23.98 Hz]
3840 x 2160, 1920 x 1080, 1280 x 720, 640 x 360:
23.98 fps, 11.99 fps, 5.99 fps (4:2:0 8 bit)
*59.94 fps/50.00 fps is only when H.265.

– JPEG has one pattern fixed depending on the
frame frequency
(format is fixed and cannot be selected)
Resolution: 1280 x 720
59.94/29.97 Hz: 14.99 fps,
50.00/25.00 Hz: 12.50 fps,
23.98 Hz: 11.99 fps

USB

Protocol²

No
Canon XC, RTSP/RTP, NDI|HX, RTMP/RTMPS, Standard
Communication (Serial), Standard Communication
(IP), SRT, FreeD
Number of presets: Max. 100
(including home position)

Preset

INTERFACE

Communication Control

LAN, Wi-Fi, Serial, IR

Network Terminal

LAN x 1, RJ45, 1000Base-T

12G-SDI OUT Terminal

BNC jack (output only) x 1, 0.8 Vp-p/75 Ω,
SMPTE ST 2082, 2081, 424, 425, 292, 259, 299, 272
compliant
Embedded audio, Time code (VITC/LTC)

6G-SDI OUT Terminal

No

3G-SDI OUT Terminal

BNC jack (output only) x 1, 0.8 Vp-p/75 Ω,
SMPTE ST 424, 425, 292, 259, 299, 272 compliant
Embedded audio, Time code (VITC/LTC)

GEN-LOCK Terminal

BNC jack (also serves as the SYNC OUT terminal)

TIME CODE Terminal

BNC jack (for both input/output)

HDMI OUT Terminal

HDM connector (Type A), both video and audio are
output only

RS-422 Terminal

RJ45 connector x 1

**AUDIO INPUT 1/INPUT 2
Terminals**

XLR 3-pin jack (balanced) ((1) shield, (2) hot,
(3) cold), two lines
Sensitivity (MIC): -60 dBu
(manual volume center, -18 dB full scale)
Sensitivity (LINE): +4 dBu
(manual volume center, -18 dB full scale)
Supply Voltage: 48 V DC (Bias resistance: 6.8 kΩ)
φ 3.5 mm stereo mini-jack (unbalanced; supports
plug-in power)
Sensitivity (MIC): -72 dBu
(manual volume center, -18 dB full scale)
Sensitivity (LINE): -10 dBV
(manual volume center, -18 dB full scale)
Supply Voltage: 2.4 V DC (Bias resistance: 2.2 kΩ)

MIC Terminal

USB Terminal

External Device I/O Terminal

No

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OTHERS

Operating Environment

Temperature
0°C – +40°C (+32°F – +104°F)

Humidity

10% – 90% (without condensation)

PoE: PoE++ power supply via LAN connector
(IEEE802.3bt compliant)

– PoE and PoE+ cannot be used

External power source: 12 V DC

Power Consumption

PoE++ Input: Approx. 37.4 W*/1.2 A max. (body only)
DC Input: Approx. 36.7 W/3.5 A max. (body only)

* Class 5 (40.0 W required) for power supply devices

Dimensions (W x H x D)

Approx. 200 x 269 x 208 mm (excluding protrusions)

Weight

Approx. 4.4 kg (9.7 lb.) (body only)

IP Rating

-

Wiper

-

Noise

NC 30 or less

Footnotes:

^[1] Color temperatures are given for reference purposes only.

^[2] NDI® is a registered trademark of NewTek, Inc.

^[3] Class 5 (40.0 W required) for power supply devices



Live for the story_

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