

**Canon**

# EOS R6



## Advanced User Guide

These operating instructions assume you are using EOS R6 firmware version 1.4.0 or later.

**E**

# Specifications

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## Type

**Type:** Digital single-lens non-reflex AF/AE camera

**Lens mount:** Canon RF mount

**Compatible lenses:** Canon RF lens group

\* Using mount adapter EF-EOS R: Canon EF or EF-S lenses (excluding EF-M lenses)

**Lens focal length:** Same as the focal length indicated on the lens

\* Using EF-S lenses: Approx. 1.6 times the indicated focal length

## Image sensor

**Type:** CMOS sensor

Screen size	Approx. 35.9×23.9 mm
Effective pixels <sup>*1,2</sup>	Max. approx. 20.1 megapixels
Dual Pixel CMOS AF	Supported

\* 1: Rounded to the nearest 100,000.

\* 2: Using RF or EF lenses. The effective pixel count may be lower with certain lenses and image processing.

## Recording system

**Image recording format:** Compliant to Design rule for Camera File system 2.0 and Exif 2.31\*

\* Supports time difference information

## Image type and extension

Image type		Extension
Still photos	JPEG	JPG
	HEIF	HIF
	RAW	CR3
	C-RAW	
Movies	ALL-I, IPB	MP4

## Still photo recording

### Still photo pixel count





















Image quality		Recorded pixels				
		Aspect ratio				
		3:2	[1.6x (crop)] <sup>1</sup>	4:3	16:9	1:1
JPEG HEIF	<b>L</b>	Approx. 20.0 megapixels (5472×3648)	Approx. 7.7 megapixels (3408×2272)	Approx. 17.7 megapixels (4864×3648)	Approx. 16.8 megapixels (5472×3072)	Approx. 13.3 megapixels (3648×3648)
	<b>M</b>	Approx. 8.9 megapixels (3648×2432)		Approx. 7.9 megapixels (3248×2432)	Approx. 7.5 megapixels (3648×2048)	Approx. 5.9 megapixels (2432×2432)
	<b>S1</b>	Approx. 5.0 megapixels (2736×1824)		Approx. 4.4 megapixels (2432×1824)	Approx. 4.2 megapixels (2736×1536)	Approx. 3.3 megapixels (1824×1824)
	<b>S2</b>	Approx. 3.8 megapixels (2400×1600)	Approx. 3.8 megapixels (2400×1600)	Approx. 3.4 megapixels (2112×1600)	Approx. 3.2 megapixels (2400×1344)	Approx. 2.6 megapixels (1600×1600)
RAW	<b>RAW / CRAW</b>	Approx. 20.0 megapixels (5472×3648)	Approx. 7.7 megapixels (3408×2272)	Approx. 20.0 megapixels (5472×3648)		

\* Values for recorded pixels are rounded off to the nearest 100,000th.

\* RAW/C-RAW images are generated in [3:2], and the set aspect ratio is appended. JPEG images are generated in the set aspect ratio.

\* 1: Angle of view of approx. 1.6 times the focal length.

## Still photo file size / Number of possible shots / Maximum burst for continuous shooting

	Image quality	File size [Approx. MB]	Possible shots [Approx.] <sup>1</sup>	Maximum burst [Approx.] <sup>5</sup>	
				Standard card <sup>1</sup>	High-speed card <sup>2</sup> (UHS-II)
JPEG <sup>3</sup>		7.1	4240	1000 or more	1000 or more
		3.9	7720	1000 or more	1000 or more
		4.0	7470	1000 or more	1000 or more
		2.3	12710	1000 or more	1000 or more
		2.8	10860	1000 or more	1000 or more
		1.7	17460	1000 or more	1000 or more
		1.8	16060	1000 or more	1000 or more
HEIF <sup>4</sup>		7.5	3940	770	1000 or more
		5.8	5060	1000 or more	1000 or more
		4.4	6530	1000 or more	1000 or more
		3.5	8220	1000 or more	1000 or more
		3.0	9330	1000 or more	1000 or more
		2.5	11160	1000 or more	1000 or more
		1.8	14100	1000 or more	1000 or more
RAW <sup>3</sup>		21.8	1400	110	240
		11.2	2750	240	1000 or more
RAW+JPEG <sup>3</sup>		21.8+7.1	1050	91	160
		11.2+7.1	1660	140	770
RAW+HEIF <sup>4</sup>		25.0+7.5	940	92	140
		14.3+7.5	1420	140	380

\* 1: The number of possible shots and standard maximum burst apply to a UHS-I compliant 32 GB card based on Canon testing standards.

\* 2: Number of shots applies to a UHS-II compliant 32 GB card based on Canon testing standards.

\* 3: Available when HDR shooting [HDR PQ] is set to [Disable].

\* 4: Available when HDR shooting [HDR PQ] is set to [Enable].

\* 5: With mechanical shutter or electronic 1st-curtain shutter, shot at approx. 12 fps.

\* File size, number of possible shots, and maximum burst vary depending on shooting conditions (including [1.6x (crop)], aspect ratio, subject, memory card brand, ISO speed, Picture Style, and Custom Function).

## Movie recording

Movie recording format: MP4

Estimated recording time, movie bit rate, and file size

Canon Log : OFF, HDR PQ : OFF


Movie recording size				Total recording time (Approx.)			Movie bit rate (Approx. Mbps)	File size (Approx. MB/min.)
Movie recording	Frame rate (fps)		Compression method	8 GB	32 GB	128 GB		
	NTSC	PAL						
4K UHD	59.94	50.00	IPB (Standard)	4 min.	18 min.	1 hr. 13 min.	230	1656
			IPB (Light)	8 min.	35 min.	2 hr. 21 min.	120	860
	29.97 23.98	25.00	IPB (Standard)	8 min.	35 min.	2 hr. 20 min.	120	869
			IPB (Light)	17 min.	1 hr. 10 min.	4 hr. 43 min.	60	431
4K UHD (Time-lapse movie)	29.97	25.00	ALL-I	2 min.	9 min.	36 min.	470	3362
Full HD (High Frame Rate movie)	119.88	100.00	IPB (Standard)	8 min.	35 min.	2 hr. 22 min.	120	858
			IPB (Light)	15 min.	1 hr. 0 min.	4 hr. 3 min.	70	501
Full HD	59.94	50.00	IPB (Standard)	17 min.	1 hr. 9 min.	4 hr. 37 min.	60	440
			IPB (Light)	30 min.	2 hr. 0 min.	8 hr. 3 min.	35	252
	29.97 23.98	25.00	IPB (Standard)	33 min.	2 hr. 15 min.	9 hr. 1 min.	30	226
			IPB (Light)	1 hr. 18 min.	5 hr. 15 min.	21 hr. 0 min.	12	97
Full HD (Time-lapse movie)	29.97	25.00	ALL-I	11 min.	47 min.	3 hr. 9 min.	90	644
Full HD (HDR movies)	29.97	25.00	IPB (Standard)	33 min.	2 hr. 15 min.	9 hr. 1 min.	30	226

Canon Log : ON or HDR PQ : ON

Movie recording size				Total recording time (Approx.)			Movie bit rate (Approx. Mbps)	File size (Approx. MB/min.)
Movie recording	Frame rate (fps)		Compression method	8 GB	32 GB	128 GB		
	NTSC	PAL						
4K UHD	59.94	50.00	IPB (Standard)	3 min.	12 min.	49 min.	340	2443
			IPB (Light)	6 min.	25 min.	1 hr. 40 min.	170	1218
	29.97 23.98	25.00	IPB (Standard)	6 min.	24 min.	1 hr. 39 min.	170	1227
			IPB (Light)	12 min.	50 min.	3 hr. 20 min.	85	610
4K UHD (Time-lapse movie)	29.97	25.00	ALL-I	2 min.	9 min.	36 min.	470	3362
Full HD (High Frame Rate movie)	119.88	100.00	IPB (Standard)	5 min.	23 min.	1 hr. 34 min.	180	1287
			IPB (Light)	10 min.	42 min.	2 hr. 50 min.	100	715
Full HD	59.94	50.00	IPB (Standard)	11 min.	46 min.	3 hr. 6 min.	90	655
			IPB (Light)	21 min.	1 hr. 24 min.	5 hr. 39 min.	50	360
	29.97 23.98	25.00	IPB (Standard)	22 min.	1 hr. 31 min.	6 hr. 6 min.	45	333
			IPB (Light)	37 min.	2 hr. 30 min.	10 hr. 3 min.	28	202
Full HD (Time-lapse movie)	29.97	25.00	ALL-I	7 min.	31 min.	2 hr. 6 min.	135	966

\* Bit rate indicates video output only, audio is not included.

\* Movie recording is interrupted if the maximum recording time per movie, 29 min. 59 sec., is exceeded. (Time is different for High Frame Rate movies.) However, depending on the shooting conditions or shooting environment, if the camera's inner temperature rises, recordable time may further become shorter.

\* Sound is not recorded for approx. the last two frames when the compression method for movie recording quality is IPB or IPB Light (audio: AAC) or  : **Audio compression** is set to **[Enable]**.

\* The video and sound may be slightly out of sync when movies are played back in Windows.

### Card performance requirements (Movie recording) [Write/Read out speed]

Movie recording size				SD card	
Resolution	Frame rate (fps)		Compression method	H.264/MPEG-4 AVC (Canon Log / Canon Log 3 : OFF, HDR PQ : OFF)	H.265/HEVC (Canon Log / Canon Log 3 : ON or HDR PQ : ON)
	NTSC	PAL			
4K UHD	59.94	50.00	IPB (Standard)	UHS-I, UHS Speed Class 3 or higher	UHS-II, Video Speed Class 60 or higher
			IPB (Light)	UHS-I, UHS Speed Class 3 or higher	UHS-I, UHS Speed Class 3 or higher
	29.97 23.98	25.00	IPB (Standard)	UHS-I, UHS Speed Class 3 or higher	
			IPB (Light)	SD Speed Class 10 or higher	UHS-I, UHS Speed Class 3 or higher
Full HD	119.88	100.00	IPB (Standard)	UHS-I, UHS Speed Class 3 or higher	
			IPB (Light)	SD Speed Class 10 or higher	UHS-I, UHS Speed Class 3 or higher
	59.94	50.00	IPB (Standard)	SD Speed Class 10 or higher	UHS-I, UHS Speed Class 3 or higher
			IPB (Light)	SD Speed Class 6 or higher	SD Speed Class 10 or higher
	29.97 23.98	25.00	IPB (Standard)	SD Speed Class 6 or higher	
			IPB (Light)	SD Speed Class 4 or higher	
4K UHD (Time-lapse movie)	29.97	25.00	ALL-I	Read speed of 60 MB/s or higher	
Full HD (Time-lapse movie)	29.97	25.00	ALL-I	Read speed of 30 MB/s or higher	

\* When cropped movie recording and Movie digital IS are disabled.

### **Built-in and external microphones**

Built-in microphone: Stereo microphones

External microphone: 3.5 mm diameter stereo mini jack

### **Recording media**

**Recording media:** SD, SDHC, SDXC memory cards

**Card slot:** Equipped with dual card slots

### **Viewfinder (Electronic viewfinder)**

**Type:** OLED color electronic viewfinder

**Screen size:** 0.5 inch

**Dot count:** Approx. 3,690,000 dots

**Magnification / angle of view:** Approx. 0.76× / Approx. 35.2° (with 50mm lens, at infinity, – 1 m<sup>-1</sup>)

**Coverage:** Approx. 100% (at JPEG Large image quality (3:2) and approx. 23 mm eyepoint)

**Eyepoint:** Approx. 23 mm (at –1 m<sup>-1</sup> from eyepiece lens end)

**Dioptric adjustment:** Approx. –4.0 to +2.0 m<sup>-1</sup> (dpt)

### **Screen**

**Type:** TFT color, liquid-crystal monitor

**Screen size:** 3.0 inch (Screen aspect ratio of 3:2)

**Dot count:** Approx. 1,620,000 dots

**Angle of view:** Approx. 170° vertically and horizontally

**Coverage:** Approx. 100% vertically and horizontally (at L image quality and an aspect ratio of 3:2)

**Screen brightness:** Adjustable to one of seven brightness levels

**Color tone adjustment:** Warm tone / Standard / Cool tone 1 / Cool tone 2

**Touch-screen panel specifications:** Capacitive sensing

### **HDMI output**

**HDMI video / audio output:** HDMI micro OUT terminal (Type D) / CEC not compatible

**HDMI output resolution:** Auto / 1080p



## Autofocus

**Focusing method:** Dual Pixel CMOS AF

### Focusing operation

	Still photo shooting	Movie recording
AF operation	One-Shot AF Servo AF AI Focus AF (with Scene Intelligent Auto)	One-Shot AF Movie Servo AF
Manual focus	Supported	Supported

### Number of AF zones available for automatic selection

AF zone	Horizontal: Approx. 100%, Vertical: Approx. 100%	
Number of AF zone	Still photos	Max. 1053 zones (39×27)
	Movie	Max. 819 zones (39×21)

\* May vary depending on settings.

### Selectable positions for AF point

AF area	Horizontal: Approx. 90%, Vertical: Approx. 100%	
Positions	Still photos	Max. 6072 positions (92×66)
	Movies	Max. 4968 positions (92×54)

\* When selected using the Multi-controller.

**Focusing brightness range (in still photo shooting):** EV -6.5 to 20 (With an f/1.2 lens\*, center AF point, One-Shot AF, at 23°C / 73°F, ISO 100)

\* Except RF lenses with a Defocus Smoothing (DS) coating

**Focusing brightness range (in movie recording):** EV -5 to 20 (With an f/1.2 lens\*, center AF point, One-Shot AF, at 23°C / 73°F, ISO 100, 29.97 fps)

\* Except RF lenses with a Defocus Smoothing (DS) coating

## Exposure control

### Metering functions under various shooting conditions

Item		Still photo shooting	Movie recording
Metering sensor		384 zone (24×16) metering using image sensor output signals	
Metering mode	Evaluative metering	Yes	Yes * When faces are detected with [L] <b>+Tracking]</b>
	Partial metering	Yes: Approx. 5.8 % of the screen	
	Spot metering	Yes: Approx. 2.9 % of the screen	
	Center-weighted average	Yes	Yes * When no faces are detected
Metering brightness range (At 23°C / 73°F, ISO 100)		EV -3 to 20	EV -1 to 20

### ISO speed (recommended exposure index) in still photo shooting

#### Manually setting ISO speed in still photo shooting

Normal ISO speed	ISO 100–102400 (in 1/3- or 1-stop increments)
Expanded ISO speed (equivalent)	L (50) H (204800)

\* With [📷 : **Highlight tone priority**], the available ISO speed range is ISO 200 to 102400.

\* Expanded ISO cannot be set in HDR mode or during HDR PQ shooting.


#### ISO Auto range setting in still photo shooting

	Auto range
ISO speed	ISO 100–102400

\* 1-stops increments

## ISO Auto details in still photo shooting

Shooting mode	No flash	Using flash
<b>A+</b>	ISO 100–25600	ISO 100–6400 <sup>4</sup>
<b>P</b>	ISO 100 <sup>1</sup> –102400 <sup>2</sup>	ISO 100 <sup>1</sup> –6400 <sup>2,4</sup>
<b>Tv</b>		
<b>Av</b>		
<b>M</b>		
<b>B</b>	ISO 400 <sup>3</sup>	ISO 400 <sup>3</sup>

\* 1: ISO 200 when  : **Highlight tone priority** is set to **[Enable]** or **[Enhanced]**.

\* 2: Varies depending on **[Maximum]** and **[Minimum]** of **[Auto range]**.

\* 3: If outside the setting range, changed to the value most close to ISO 400.

\* 4: ISO 1600 when using lenses incompatible with **[Variable control of maximum ISO Auto limit for E-TTL]**.

## ISO speed for movie recording

Manually set ISO speed in movie recording

	Highlight tone priority	Normal ISO speed	Expanded ISO speed
Normal movies	Disable	ISO 100–25600	ISO 100–H (204800)
	Other than disable	ISO 200–25600	
Canon Log movies	Disable (fixed)	ISO 400–25600	ISO L (100)–H (204800)
HDR movies <sup>*1</sup> / HDR PQ movies	Disable	ISO 100–25600	
	Other than disable	ISO 200–25600	

\* 1-stops in 1/3-stop increments

\* Expanded ISO speeds are noted as being "equivalent" to these speeds.

\* 1: Fixed to **[Disable]**.

## ISO speed range in movie recording

	Highlight tone priority	Normal ISO speed	Expanded ISO speed
Normal movies	Disable	ISO 100–25600	ISO 100–H (204800)
	Enable	ISO 200–25600	
Canon Log movies	Disable (fixed)	ISO 400–25600	ISO 400–H (204800)
HDR movies <sup>*1</sup> / HDR PQ movies	Disable	ISO 100–25600	
	Enable	ISO 200–25600	

\* 1-stops increments

\* Expanded ISO speeds are noted as being "equivalent" to these speeds.

\* 1: Fixed to **[Disable]**.

## Maximum setting of ISO Auto range in movie recording

Item	ISO speed
Max for Auto	ISO 6400–H (204800)
<b>[Time-lapse movie]</b> Max for Auto	ISO 400–25600

\* Expanded ISO speeds are noted as being "equivalent" to these speeds.

## Shutter

### Still photo shooting

Type: Electronically controlled focal-plane shutter

Shutter mode

Mechanical shutter
Electronic 1st curtain
Electronic shutter

### Shutter speed

When [Mechanical] or [Elec. 1st-curtain] is set		1/8000–30 sec., Bulb
When [Electronic] is set		1/8000–0.5 sec.
X-sync	Mechanical shutter	1/200 sec.
	Electronic 1st curtain	1/250 sec.

### Movie recording

Type: Rolling shutter, using the image sensor

Shutter speed:

Movie auto exposure: 1/4000–1/25 sec.

Movies manual exposure: 1/4000–1/8\*<sup>1</sup> sec.

\* Varies by shooting mode and frame rate.

\* 1: 1/125 sec. (NTSC) or 1/100 sec. (PAL) with [High Frame Rate] set to [Enable].

## External flash

**Sync contacts:** Hot shoe: X-sync contact

\* Maximum flash sync speed: 1/250 sec. with electronic 1st-curtain, 1/200 sec. with mechanical shutter.

## Drive

### Drive mode and continuous shooting speed

Drive modes	Mechanical shutter	Electronic 1st curtain	Electronic shutter
Single shooting	Yes	Yes	Yes
High-speed continuous shooting +	Max. approx. 12 shots/sec.		Max. approx. 20 shots/sec. * Lenses other than EF-S lenses
High-speed continuous shooting	Max. approx. 6.0 shots/sec.	Max. approx. 8.0 shots/sec.	
Low-speed continuous shooting	Max. approx. 3.0 shots/sec.		
Self-timer:10 sec / remote control	Yes		
Self-timer:2 sec / remote control	Yes		

## Image stabilization (IS mode): Provided

### Playback

Item	Still photo	Movie
Magnify zoom display	1.5x–10x (15 levels)	
AF point display	Yes	
Grid display	Off / 3×3 / 6×4 / 3×3+diag	
Rating	OFF / ★ to ★★★★★ Select images / Select range / All images in folder / All images on card / All found images	
Image search	Search conditions Rating / Date / Folder / Protect / Type of file	
Protect	Select images / Select range / All images in folder / Unprotect all images in folder / All images on card / Unprotect all images on card / All found images	
In-camera RAW image processing	Supported	
Resizing	Supported	
Cropping	Supported	

## Print order (DPOF): Compliant with DPOF Version 1.1

### Customization (C.Fn)

**Custom Function:** 21 Custom Functions are settable

### External interface

#### Digital terminal

Terminal type	USB Type-C
Transmission	SuperSpeed Plus USB (USB 3.1 Gen 2) equivalent
Applications	For computer communication

\* Shared with terminal for in-camera charging/camera power supplying using USB Power Adapter PD-E1.

**HDMI micro OUT terminal:** Type D (Resolution switches automatically)

**External microphone input terminal:** Compatible with the 3.5 mm diameter stereo mini plug

**Headphone terminal:** Compatible with the 3.5 mm diameter stereo mini plug

**Remote control terminal:** Remote Switch RS-60E3 type terminal supported

## Power source

### Battery

Compatible battery packs	LP-E6NH/LP-E6N/LP-E6
Quantity used	1

**USB battery charging and camera power:** Using USB Power Adapter PD-E1

### AC power source

AC adapter	AC-E6N
DC coupler	DR-E6

### Possible shots

Configuration	Shooting method	Battery	Temperature	Battery life (Approx. number of shots) AE: 100%	
				Smooth	Power saving
Camera body only	Viewfinder	LP-E6NH	23°C / 73°F	250	380
			0°C / 32°F	250	380
	Screen		23°C / 73°F	360	510
			0°C / 32°F	350	510
Eco mode (Screen)	23°C / 73°F	590	730		
With battery grip BG-R10	Viewfinder	Two LP-E6NH batteries	23°C / 73°F		750
	Screen	Two LP-E6NH batteries	23°C / 73°F		1020

\* With a fully charged LP-E6NH

## Available operating time

Conditions of use			Temperature	Available operating time
Time available for bulb exposure			23°C / 73°F	Approx. 5 hr. 40 min.
Time available for Live View shooting			23°C / 73°F	Approx. 4 hr. 15 min.
Time available for movie recording Movie Servo AF: Disable	4K UHD	IPB (Standard) 59.94 fps / 50.00 fps	23°C / 73°F	Approx. 1 hr. 20 min.
	Full HD	IPB (Standard) 29.97 fps / 25.00 fps	23°C / 73°F	Approx. 2 hr. 40 min.
0°C / 32°F			Approx. 2 hr. 25 min.	
Time available for time-lapse movie recording	Full HD recording interval: 5 sec.	Screen on	23°C / 73°F	Approx. 2 hr. 20 min.
		Screen off	23°C / 73°F	Approx. 7 hr. 55 min.
Time available for continuous playback	Movies (normal playback)		23°C / 73°F	Approx. 5 hr. 35 min.

\* With a fully charged LP-E6NH

## Battery information

Remaining capacity	In 1% increments 5-level indicator
Number of shots	Supported
Recharge performance	3 levels
Battery registrations	Supported (up to 6)
Battery information	Serial number, remaining capacity when removed, date



## Dimensions and weight

### Dimensions

(W)×(H)×(D)	Approx. 138.4×97.5×88.4 mm
(W)×(H)×(D)	Approx. 5.45×3.84×3.48 in.

\* Based on CIPA guidelines.

### Weight

Body (including battery and memory card)	Approx. 680 g	Approx. 23.99 oz.
Body only	Approx. 598 g	Approx. 21.10 oz.

\* Weighed without body cap.

### Operating environment

**Operating temperature:** 0–40°C / 32–104°F

**Operating humidity:** 85% or less

## Wi-Fi (Wireless LAN) communication functions

### Standards compliance

Wi-Fi standards	Transmission method	Maximum link speed
IEEE802.11b	DS-SS modulation	11Mbps
IEEE802.11g	OFDM modulation	54Mbps
IEEE802.11n		72.2Mbps

### Transmission frequency (Center frequency)

Frequency	2412–2462 MHz
Channels	1–11 channels

### Connection, authentication, and data encryption methods

Connection method	Authentication	Encryption
Camera access point	WPA2-PSK	AES
	Open	Disable
Infrastructure	Open	WEP
		Disable
	Shared key	WEP
	WPA-PSK	TKIP AES
	WPA2-PSK	

## Bluetooth

**Standards compliance:** Bluetooth Specification Version 4.2 compliant (Bluetooth Low Energy technology)

**Transmission method:** GFSK modulation

- All data above is based on Canon testing standards and CIPA (Camera & Imaging Products Association) testing standards and guidelines.
- Dimensions and weight listed above are based on CIPA Guidelines (except weight for camera body only).
- Product specifications and appearance are subject to change without notice.
- If a problem occurs with a non-Canon lens attached to the camera, contact the respective lens manufacturer.