Instruction Manual

Instruction manuals (PDF files) and software can be downloaded from the Canon Web site (p.4, 445).

www.canon.com/icpd
Specifications

• Type
  Type: Digital, single-lens reflex, AF/AE camera with built-in flash
  Recording media: SD/SDHC*/SDXC* memory cards
    * UHS-I cards supported
  Image sensor size: Approx. 22.3 x 14.9 mm
  Compatible lenses: Canon EF lenses (including EF-S lenses)
    * Excluding EF-M lenses
    (35mm-equivalent angle of view is that of a lens with approx. 1.6x the focal length indicated.)
  Lens mount: Canon EF mount

• Image Sensor
  Type: CMOS sensor
  Effective pixels: Approx. 24.2 megapixels
    * Rounded to the nearest 100,000.
  Aspect ratio: 3:2
  Dust deletion: Auto, Manual, Dust Delete Data appending

• Recording System
  Recording format: Design rule for Camera File System (DCF) 2.0
  Image type: JPEG, RAW (14-bit Canon original), RAW+JPEG Large simultaneous recording possible
  Pixels recorded:
    L (Large) : 24.0 megapixels (6000 x 4000)
    M (Medium) : Approx. 10.6 megapixels (3984 x 2656)
    S1 (Small 1) : Approx. 5.9 megapixels (2976 x 1984)
    S2 (Small 2) : Approx. 3.8 megapixels (2400 x 1600)
    RAW : 24.0 megapixels (6000 x 4000)
  Aspect ratio: 3:2, 4:3, 16:9, 1:1
  Folder Creation/selection: Possible
  File numbering: Continuous, Auto reset, Manual reset
### Image Processing During Shooting

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Picture Style:</strong></td>
<td>Auto, Standard, Portrait, Landscape, Fine Detail, Neutral, Faithful, Monochrome, User Defined 1 - 3</td>
</tr>
<tr>
<td><strong>White balance:</strong></td>
<td>Auto (Ambience priority), Auto (White priority), Preset (Daylight, Shade, Cloudy, Tungsten light, White fluorescent light, Flash), Custom White balance correction, and White balance bracketing provided</td>
</tr>
<tr>
<td>* Flash color temperature information transmission possible</td>
<td></td>
</tr>
<tr>
<td><strong>Noise reduction:</strong></td>
<td>Applicable to long exposures and high ISO speed shots</td>
</tr>
<tr>
<td><strong>Automatic image brightness correction:</strong></td>
<td>Auto Lighting Optimizer provided</td>
</tr>
<tr>
<td><strong>Highlight tone priority:</strong></td>
<td>Provided</td>
</tr>
<tr>
<td><strong>Lens aberration correction:</strong></td>
<td>Peripheral illumination correction, Chromatic aberration correction, Distortion correction, Diffraction correction</td>
</tr>
</tbody>
</table>

### Viewfinder

<table>
<thead>
<tr>
<th>Specification</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type:</strong></td>
<td>Eye-level pentamirror</td>
</tr>
<tr>
<td><strong>Field of view coverage:</strong></td>
<td>Vertical/Horizontal approx. 95% (with Eye point approx. 19 mm)</td>
</tr>
<tr>
<td><strong>Magnification:</strong></td>
<td>Approx. 0.87x (-1 m⁻¹ with 50mm lens at infinity)</td>
</tr>
<tr>
<td><strong>Eyepoint:</strong></td>
<td>Approx. 19 mm (from eyepiece lens center at -1 m⁻¹)</td>
</tr>
<tr>
<td><strong>Dioptic adjustment range:</strong></td>
<td>Approx. -3.0 - +1.0 m⁻¹ (dpt)</td>
</tr>
<tr>
<td><strong>Focusing screen:</strong></td>
<td>Fixed, Precision Matte</td>
</tr>
<tr>
<td><strong>Mirror:</strong></td>
<td>Quick-return type</td>
</tr>
<tr>
<td><strong>Depth-of-field preview:</strong></td>
<td>Provided</td>
</tr>
</tbody>
</table>
Specifications

• **Autofocus** (for viewfinder shooting)
  
  **Type:** TTL secondary image-registration, phase-difference detection with the dedicated AF sensor
  
  **AF points:** 9-point AF (Center point: cross-type, vertical line sensitive when supporting f/2.8)
  
  **Focusing brightness range:** EV -0.5 - 18 (with the center AF point supporting f/2.8, One-Shot AF, at room temperature, ISO 100)
  
  **Focus operation:** One-Shot AF, AI Servo AF, AI Focus AF, Manual focusing (MF)
  
  **AF-assist beam:** Small series of flashes fired by built-in flash

• **Exposure Control**
  
  **Metering mode:** 63-zone TTL open-aperture metering
  
  • Evaluative metering (linked to all AF points)
  
  • Partial metering (approx. 9.0% of viewfinder at center)
  
  • Spot metering (approx. 4.0% of viewfinder at center)
  
  • Center-weighted average metering
  
  **Metering brightness range:** EV 1 - 20 (at room temperature, ISO 100)
  
  **Shooting mode:** Basic Zone modes: Scene Intelligent Auto, Flash Off, Creative Auto, Special scene modes (Portrait, Group Photo, Landscape, Sports, Kids, Close-up, Food, Candlelight, Night Portrait, Handheld Night Scene, HDR Backlight Control), Creative filters (Grainy B/W, Soft focus, Fish-eye effect, Water painting effect, Toy camera effect, Miniature effect, HDR art standard, HDR art vivid, HDR art bold, HDR art embossed)
  
### Specifications

<table>
<thead>
<tr>
<th>ISO speed (Recommended exposure index):</th>
<th>Basic Zone modes: ISO speed set automatically</th>
<th>Creative Zone modes: ISO Auto, ISO 100 - ISO 25600 set manually (whole-stop increments), and ISO expansion to H (equivalent to ISO 51200) provided</th>
</tr>
</thead>
<tbody>
<tr>
<td>AE lock:</td>
<td>Auto: Applied in One-Shot AF with evaluative metering when focus is achieved</td>
<td>AEB: ±2 stops in 1/3- or 1/2-stop increments (can be combined with manual exposure compensation)</td>
</tr>
<tr>
<td>Manual: With AE lock button</td>
<td></td>
<td><strong>Shutter</strong></td>
</tr>
<tr>
<td>Shutter speed:</td>
<td>1/4000 sec. to 30 sec. (total shutter speed range; available range varies by shooting mode), Bulb, X-sync at 1/200 sec.</td>
<td></td>
</tr>
<tr>
<td><strong>Drive System</strong></td>
<td>Single shooting, Continuous shooting, Silent single shooting, Silent continuous shooting, 10-sec. self-timer/remote control*, 2-sec. delay, 10-sec. delay with continuous shooting</td>
<td></td>
</tr>
<tr>
<td>Drive mode:</td>
<td></td>
<td>* When Wireless Remote Control BR-E1 (sold separately) is used.</td>
</tr>
<tr>
<td>Continuous shooting speed:</td>
<td>Max. approx. 5.0 shots/sec.*</td>
<td>Max. approx. 3.5 shots/sec. during Live View shooting or when [Servo AF] is set.</td>
</tr>
<tr>
<td>Silent continuous shooting: Max. approx. 2.5 shots/sec.</td>
<td><strong>Max. burst:</strong></td>
<td>JPEG Large/Fine: Full (Full)</td>
</tr>
<tr>
<td>RAW: Approx. 6 shots (approx. 6 shots)</td>
<td>RAW+JPEG Large/Fine: Approx. 6 shots (approx. 6 shots)</td>
<td>* Figures are based on Canon’s testing standards (3:2 aspect ratio, ISO 100 and Standard Picture Style) using a Canon’s standard testing 8 GB card.</td>
</tr>
<tr>
<td>* Figures in parentheses are the number of shots when a Canon’s standard testing UHS-I 16 GB card is used.</td>
<td><strong>“Full” indicates that shooting is possible until the card becomes full.</strong></td>
<td></td>
</tr>
</tbody>
</table>
### Specifications

#### Flash

<table>
<thead>
<tr>
<th>Built-in flash:</th>
<th>Retractable, auto pop-up flash</th>
</tr>
</thead>
<tbody>
<tr>
<td>Guide No.:</td>
<td>Approx. 9.8/32.1 (ISO 100, in meters/feet)</td>
</tr>
<tr>
<td>Flash coverage:</td>
<td>Approx. 18mm lens angle of view</td>
</tr>
<tr>
<td>Recharge time:</td>
<td>Approx. 3 sec.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>External Speedlite:</th>
<th>Compatible with EX-series Speedlites</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flash metering:</td>
<td>E-TTL II autoflash</td>
</tr>
<tr>
<td>Flash exposure compensation:</td>
<td>±2 stops in 1/3- or 1/2-stop increments</td>
</tr>
<tr>
<td>FE lock:</td>
<td>Provided</td>
</tr>
<tr>
<td>PC terminal:</td>
<td>Not provided</td>
</tr>
<tr>
<td>Flash control:</td>
<td>Built-in flash function settings, external Speedlite function settings, external Speedlite Custom Function settings</td>
</tr>
</tbody>
</table>

#### Live View Shooting

<table>
<thead>
<tr>
<th>Focus method:</th>
<th>Dual Pixel CMOS AF system</th>
</tr>
</thead>
<tbody>
<tr>
<td>AF method:</td>
<td>Face+Tracking, Smooth zone, Live 1-point AF</td>
</tr>
<tr>
<td>Manual focus:</td>
<td>(approx. 5x / 10x magnification possible)</td>
</tr>
<tr>
<td>AF operation:</td>
<td>One-Shot AF, Servo AF</td>
</tr>
<tr>
<td>Focusing brightness range:</td>
<td>EV -2 - 18 (at room temperature, ISO 100, One-Shot AF)</td>
</tr>
<tr>
<td>Metering mode:</td>
<td>Evaluative metering (315 zones), Partial metering (approx. 6.0% of Live View screen), Spot metering (approx. 2.6% of Live View screen), Center-weighted average metering</td>
</tr>
<tr>
<td>Metering brightness range:</td>
<td>EV 0 - 20 (at room temperature, ISO 100)</td>
</tr>
<tr>
<td>Exposure compensation:</td>
<td>±3 stops in 1/3-stop or 1/2-stop increments</td>
</tr>
<tr>
<td>Creative filters:</td>
<td>Provided</td>
</tr>
<tr>
<td>Touch Shutter:</td>
<td>Provided</td>
</tr>
<tr>
<td>Grid display:</td>
<td>Three types</td>
</tr>
</tbody>
</table>
• **Movie Shooting**

**Recording format:** MP4

* Time-lapse movie shooting: MOV

**Movie:** MPEG-4 AVC / H.264

Variable (average) bit rate

**Audio:** AAC

**Recording size and frame rate:**

- Full HD (1920x1080): 59.94p/50.00p/29.97p/25.00p/23.98p
- HD (1280x720): 59.94p/50.00p/29.97p/25.00p
- VGA (640x480): 29.97p/25.00p

**Compression method:** IPB (Standard), IPB (Light)

* Time-lapse movie shooting: ALL-I

**Bit rate:**

- Full HD (59.94p/50.00p)/IPB (Standard): Approx. 60 Mbps
- Full HD (29.97p/25.00p/23.98p)/IPB (Standard): Approx. 30 Mbps
- Full HD (29.97p/25.00p)/IPB (Light): Approx. 12 Mbps
- HD (59.94p/50.00p)/IPB (Standard): Approx. 26 Mbps
- HD (29.97p/25.00p)/IPB (Light): Approx. 4 Mbps
- VGA (29.97p/25.00p) (Standard): Approx. 9 Mbps
- VGA (29.97p/25.00p) (Light): Approx. 3 Mbps
- HDR movie: Approx. 30 Mbps
- Time-lapse movie: Approx. 90 Mbps

**Focus system:** Dual Pixel CMOS AF system

**AF method:** Face+Tracking, Smooth zone, Live 1-point AF

Manual focus (approx. 5x / 10x magnification available for focus check)

**Movie Servo AF:** Provided

**Digital zoom:** Approx. 3x - 10x

**Focusing brightness range:** EV -2 - 18 (at room temperature, ISO 100, One-Shot AF)

**Metering mode:** Center-weighted average and Evaluative metering with the image sensor

* Automatically set by the AF method
Specifications

Metering brightness range: EV 0 - 20 (at room temperature, ISO 100, with center-weighted average metering)
Exposure control: Autoexposure shooting (Program AE for movie shooting) and manual exposure
Exposure compensation: ±3 stops in 1/3- or 1/2-stop increments
ISO speed (Recommended exposure index):
- For autoexposure shooting: ISO 100 - ISO 12800 set automatically. In Creative Zone modes, the upper limit is expandable to H (equivalent to ISO 25600).
- For manual exposure shooting: ISO Auto (ISO 100 - ISO 12800 set automatically), ISO 100 - ISO 12800 set manually (whole-stop increments), expandable to H (equivalent to ISO 25600)
ISO speed settings: Maximum limit for ISO Auto settable
HDR movie shooting: Possible
Creative filters for movies:
- Dream, Old Movies, Memory, Dramatic B&W, Miniature effect movie
Video snapshots: Settable to 2 sec., 4 sec., 8 sec.
Sound recording: Built-in stereo microphones, external stereo microphone terminal provided
- Sound-recording level adjustable, wind filter provided, attenuator provided
Grid display: Three types
Time-lapse movie:
- Shooting interval (hours:minutes:seconds), Number of shots, Auto exposure (Fixed 1st frame, Each frame), LCD auto off, Beep as image shot settable
Still photo shooting: Not possible during movie shooting

• LCD Monitor
Type: TFT color, liquid-crystal monitor
Monitor size and dots: Wide 7.7 cm (3.0 in) (3:2) with approx. 1.04 million dots
Brightness adjustment: Manual (7 levels)
Interface languages: 25
Touch screen technology: Capacitive sensing
• **Playback**

**Image display format:**
Single-image display (without shooting information),
Single-image display (with basic information),
Single-image display (Shooting information displayed: Detailed information, Lens/histogram, White balance, Picture Style 1, Picture Style 2, Color space/noise reduction, Lens aberration correction),
Index display (4/9/36/100 images)

**Highlight alert:**
Overexposed highlights blink

**AF point display:**
Provided (may not be displayed depending on shooting conditions)

**Zoom magnification ratio:**
Approx. 1.5x - 10x

**Image search:**
Search conditions settable (Rating, Date, Folder, Protect, File type)

**Image browsing methods:**
Single image, 10 images, specified number, date, folder, movies, stills, protect, rating

**Image rotation:**
Provided

**Image protection:**
Provided

**Rating:**
Provided

**Movie playback:**
Possible (LCD monitor, HDMI), built-in speaker

**Slide show:**
Automatically play back all images or the images that match search conditions

**Background music:**
Selectable for slide shows and movie playback

• **Post-Processing of Images**

**Creative filters:**
Grainy B/W, Soft focus, Fish-eye effect, Art bold effect, Water painting effect, Toy camera effect, Miniature effect

**Resize:**
Provided

**Cropping:**
Provided

• **Print Ordering**

**DPOF:**
Version 1.1 compliant
Specifications

**Customization Features**

- **Custom Functions:** 11
- **My Menu:** Up to 5 screens can be registered
- **Copyright information:** Text entry and appending possible
- **Display level settings:** Shooting screen, Menu display, Mode guide, Feature guide

**Interface**

- **DIGITAL terminal:** Computer communication (Hi-Speed USB equivalent), Connect Station CS100 connection
- **HDMI mini OUT terminal:** Type C (Auto switching of resolution), CEC-compatible
- **External microphone IN terminal:** 3.5 mm diameter stereo mini-jack
- **Remote control terminal:** Directional Stereo Microphone DM-E1 connection
- **Wireless remote control:** Compatible with Wireless Remote Control BR-E1 (Bluetooth connection)
- **Eye-Fi card:** Supported

**Power**

- **Battery:** Battery Pack LP-E17 (Quantity 1)
  - *AC power usable with household power outlet accessories.
- **Number of possible shots:**
  - With viewfinder shooting: Approx. 650 shots at room temperature (23°C/73°F), approx. 620 shots at low temperatures (0°C/32°F)
  - With Live View shooting: Approx. 260 shots at room temperature (23°C/73°F), approx. 240 shots at low temperatures (0°C/32°F)
  - *With a fully-charged Battery Pack LP-E17
- **Movie shooting time:**
  - Approx. 2 hr. at room temperature (23°C/73°F)
  - Approx. 1 hr. 45 min. at low temperatures (0°C/32°F)
  - *With a fully-charged Battery Pack LP-E17
• **Dimensions and Weight**
  Dimensions (W x H x D): Approx. 122.4 x 92.6 x 69.8 mm / 4.82 x 3.65 x 2.75 in.

  Weight (Black):
  - Approx. 453 g / 15.98 oz. (Including battery and card)
  - Approx. 406 g / 14.32 oz. (Body only)

  Weight (Silver):
  - Approx. 454 g / 16.01 oz. (Including battery and card)
  - Approx. 407 g / 14.36 oz. (Body only)

  Weight (White):
  - Approx. 456 g / 16.08 oz. (Including battery and card)
  - Approx. 409 g / 14.43 oz. (Body only)

• **Operation Environment**
  Working temperature range: 0°C - 40°C / 32°F - 104°F
  Working humidity: 85% or less

  All the data above is based on Canon’s 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 the exterior are subject to change without notice.
  If a problem occurs with a non-Canon lens attached to the camera, consult the respective lens manufacturer.