# Clifton Cameras Specifications Sheet

For the

# Canon EOS 1DX Mark III Digital SLR

Image Sensor
Туре
36 x 24 mm CMOS
Effective Pixels
Approx. 20.1 M
Total Pixels
Approx. 21.4 M
Aspect Ratio
3:2
Low-Pass Filter
Built-in/Fixed with Self Cleaning Sensor Unit
Colour Filter Type
Primary Colour
Image Processor
Туре
DIGIC X

Lens

**Lens Mount** 

EF (excludes EF-S/EF-M lenses)

#### **Focal Length**

1.x Multiplication with EF lens fitted

# SLR FOCUSING

## Type

TTL secondary image-forming phase-difference detection using AF-dedicated sensor

# AF System / Points

191 Point/155 f/4 cross-type AF points inc 1 dual cross type at f/2.8 1

The number of cross-type AF points will differ depending on the lens.

## AF working range

EV -4 to 21 (at 20°C & ISO 100)

#### **AF Modes**

One Shot

Al Focus

#### **AF Point Selection**

Automatic selection: 191 point AF (inc face tracking and Eye AF)

Manual selection: Single point AF (selectable points all points, 61, 15, 9 or cross type

only points selectable)

Manual selection: Spot AF

Manual selection: AF point Expansion 4 points (up, down, left, right)

Manual selection: AF point Expansion surrounding 8 points

Manual selection: Zone AF

Manual selection: Large Zone AF

AF points can be selected separately for vertical and horizontal shooting

#### Selected AF point display

Superimposed in viewfinder and indicated on LCD panel

#### AF Lock

Locked when shutter button is pressed half way or AF ON is pressed in One Shot AF mode.

#### **AF Assist Beam**

Emitted by an optional dedicated Speedlite

#### **Manual Focus**

Selected on lens

## **AF Microadjustment**

Manual: Enter adjustment level +/- 20 steps

Adjust all lenses by same amount

Adjust up to 20 lenses individually

Adjust per lens serial number

# **Exposure Control**

#### **Metering modes**

400,000-pixel RGB+IR metering sensor, 384-zone metering

- (1) Evaluative metering (linked to All AF point)
- (2) Partial metering (approx. 6.2% of viewfinder at centre)
- (3) Spot metering: Center spot metering (approx. 1.5% viewfinder at centre)

AF point-linked spot metering

Multi-spot metering

(4) Centre weighted average metering

## **Metering Range**

EV 0-20 (at 23°C with 50 mm f1.4 lens ISO 100) EV -3-20 in Live and movie

#### **AE Lock**

Auto: Operates in 1-shot AF mode with evaluative metering when focus is achieved

Manual: By AE lock button in all exposure modes

#### **Exposure Compensation**

+/-5 EV in 1/3 or 1/2 stop increments (can be combined with AEB).

#### AEB

2, 3, 5 or 7 Shots +/-3 EV 1/3 or 1/2 stop increments

# **Anti-flicker shooting**

Yes. Flicker detected at a frequency of 100 Hz or 120 Hz. Maximum continuous shooting speed may decrease

#### **ISO Speed Equivalent**

Stills: 100-102400 (in 1/3-stop increments) ISO can be expanded to L: 50 or H1: 204800, H2: 409600, H3: 819200 (selected in Custom Function)

# Shutter

#### **Type**

Vertical-travel mechanical focal-plane shutter, electronically controlled at all speeds/Sensor Electronic shutter

# **Speed**

30 - 1/8000 sec. (1/3 stop increments), Bulb

#### **Shutter Release**

Soft touch electromagnetic release

# White Balance

### Type

Auto white balance with the imaging sensor

## Settings

Auto (Ambience priority/White Priority), Daylight, Shade, Cloudy, Tungsten light, White Fluorescent light, Flash, Custom, Colour Temperature Setting

White balance compensation:

- 1. Blue/Amber +/-9
- 2. Magenta/Green +/-9.

# **WB Bracketing**

- +/-3 levels in single level increments
- 3, 2, 5 or 7 bracketed images per shutter release

Selectable Blue/Amber bias or Magenta/Green bias.

# Viewfinder

Viewfinder

Pentaprism

Coverage (Vertical/Horizontal)

Approx. 100%

Magnification

 $0.76x^{2}$ 

Eyepoint

20 mm

**Dioptre Correction** 

-3 to +1 dpt

**Focusing Screen** 

fixed

Mirror

Quick-return all surface half mirror

#### **Viewfinder Information**

AF information: Single/Spot AF points, AF Frame, AF status, Focus indicator, AF mode, AF point selection, AF point registration

Exposure information: Shutter speed, aperture value, ISO speed (always displayed), AE lock, exposure level/compensation, flash metering, spot metering circle, exposure warning, AEB, metering mode, shooting mode, time

Flash information: Flash ready, high-speed sync, FE lock, flash exposure compensation, red-eye reduction light.

Image information: Card information, maximum burst (2 digit display), Highlight tone priority (D+).

Composition information: Crop area, Aspect ratio, Grid, Electronic level

Other information: Battery check, Warning symbol, Flicker Detection, drive mode, white balance, JPEG/RAW indicator

Depth of field preview

Yes

**Eyepiece shutter** 

Built in

**LCD Monitor** 

#### Monitor

3.2" (8.01 cm) TFT, approx. 2.1 million dots

# Coverage

Approx. 100%

# **Viewing Angle (horizontally/vertically)**

Approx. 170°

# Coating

Anti-reflection and Solid Structure

#### **Brightness**

Auto: Using external ambient light sensor

Manual: Adjustable to one of seven levels

4 color tone Adjustable settings

# **Display Options**

- (1) Quick control Screen
- (2) Camera settings
- (3) Dual Axis Electronic Level
- (4) Custom Quick control screen

# Flash

# Modes

E-TTL II Auto Flash, Metered Manual

### X-sync

1/250 sec

# Flash Exposure Compensation

+/-3 EV in 1/3-stop increments with EX series Speedlites

# Flash Exposure Bracketing

Yes, with compatible External Flash

Flash Exposure Lock

Yes

**HotShoe / PC terminal** 

Yes/Yes

**Second Curtain Synchronisation** 

Yes

**External Flash Compatibility** 

E-TTL II with EX series Speedlites, wireless multi-flash support

**External Flash Control** 

via camera menu screen

# **Shooting**

#### Modes

Program AE, Shutter priority AE, Aperture priority AE, Manual, 3x Custom settings

#### **Picture Styles**

Auto, Standard, Portrait, Landscape, Neutral, Faithful, Monochrome, Fine Detail, User Defined (x3)

**Colour Space** 

sRGB and Adobe RGB

**Image Processing** 

Clarity (8 levels)

Highlight Tone Priority (2 settings)

Auto Lighting Optimizer (4 settings)

Long exposure noise reduction

High ISO speed noise reduction (4 settings)

Lens optical correction:

- Peripheral illumination correction (stills and video)
- Chromatic aberration correction (stills and video)
- Distortion correction (during or after still photo shooting)
- Diffraction correction (stills and video)
- Digital Lens Optimizer (during or after still photo shooting)

Resize to M1, M2 or S <sup>3</sup>

RAW image processing - during image Playback only

Crop images/rotate (3:2, 16:9, 4:3, 1:1, 2:3, 9:16, 3:4 ratios)

Multiple exposure

#### **Drive modes**

Single, Continuous L, Continuous H, Self timer (2s+remote, 10s+remote), S single soft shooting, continuous soft shooting

#### **Continuous Shooting**

Max. Approx. 16ps.

Max. 20 fps in Live View mode with mirror locked up with exposure and AF tracking (speed maintained for unlimited number of JPEGs or over 1000 RAW images) <sup>4</sup>

# Live View Mode

# Type

Electronic viewfinder with image sensor

#### Coverage

Approx. 100% (horizontally and vertically)

#### Frame Rate

For Stills 29.97 fps/for Movies 59.94 fps/29.97 fps (NTSC) 50.00 fps/25.00 fps (PAL)

### Focusing

Manual Focus (Magnify the image 5x or 10x at any point on screen)

Autofocus: Dual Pixel CMOS AF (Face+Tracking

Spot AF

1-point AF

Expand AF area:

Expand AF area: Around

Zone AF

Large Zone AF: Vertical

Large Zone AF: Horizontal)

# Metering

Real-time evaluative metering with image sensor (384-zone)

Partial metering (approx. 5.8% of Live View screen)

Spot metering (approx. 2.9% of Live View screen)

Center-weighted average metering

Active metering time can be changed

# **Display Options**

Grid overlay (x3), Basic shooting information, Detailed shooting information, Histogram, Electronic Level

# File Type

# Still Image Type

JPEG: 10 compression options

HEIF: 10 compression options (10bit 422 BT2100)

RAW: RAW, CRAW

Complies with Exif 2.31 and Design rule for Camera File system 2.0

Complies with Digital Print Order Format [DPOF] Version 1.1

#### **RAW+JPEG** simultaneous recording

Yes, any combination of RAW + JPEG/HEIF possible, separate formats to separate cards possible

#### Image Size

JPEG/HEIF: (L) 5472x3648, (M1) 4368x2912, (M2) 3648x2432, (S) 2736x1824

HEIF: 5472x3648

RAW: (RAW/C-RAW) 5472x3648

#### Folders

New folders can be manually created and selected

#### File Numbering

- (1) Consecutive numbering
- (2) Auto reset
- (3) Manual reset

# **EOS Movie**

#### **Movie Type**

RAW: CRM 12bit Audio: Linear PCM

MP 4 Video: 4K (8bit MPEG4 AVC/H.264, 10bit MPEG4/HEVC with Canon log), Full HD

- MPEG4 AVC/H.264, Audio: Linear PCM

MP4 Video: Full HD IPB light - MPEG4 AVC/H.264, Audio: AAC

#### **Movie Size**

4K RAW (5496x2904) - (23.98, 24, 25, 29.97, 50, 59.94 fps)

4K DCI (17:9) - 4096x2160 (23.98, 24, 25, 29.97, 50, 59.94 fps) intra or inter frame

4K UHD (16:9) - 3840x2160 (23.98, 25, 29.97, 50, 59.94 fps) intra or inter frame

4K DCI cropped (17:9) - 4096x2160 (23.98, 24, 25, 29.97, 50, 59.94 fps) intra or interframe

Full HD (16:9) - 1920x1080 (23.98, 24, 25, 29.97, 50, 59.94 fps) intra or inter frame plus IPB light

# Simultaneous recording

Yes: RAW to card in slot 1 Proxy (MP4) to card in slot 2

#### **Colour Sampling (Internal recording)**

4K - YCbCr4:2:2 (8-bit)

Full HD/HD - YCbCr4:2:0 (8-bit)

## Canon Log

Yes Log 1

## **Movie Length**

4K and Full HD - Max duration 29 min 59 sec. (excluding High Frame Rate movies). No 4GB file limit with exFAT CF card.

#### **High Frame Rate Movie**

MOV Video: Full HD - 1920x1080 at 100 fps or 119.9 fps

Recorded as 1/4-speed slow motion movie

Single scene maximum recording up to 7 min 29 sec.

#### 4K Frame Grab

8.3-megapixel JPEG still image frame grab from 4K movie possible

#### Bitrate / Mbps

5.5K RAW: (50/59.94p) Approx. 2600 Mbps (30/25/24/23.98p) Approx. 1800 Mbps

## Canon Log off (H264 MP4)

4K DCI (50/59.94p): ALL-I Approx. 940 Mbps, IPB Approx. 230 Mbps

4K DCI (29.97p/25.00p/24.00p/23.98p): ALL-I Approx. 470 Mbps, IPB Approx. 120 Mbps

4K DCI cropped (50/59.94p): ALL-I Approx. 940 Mbps, IPB Approx. 230 Mbps

4K DCI cropped (29.97p/25p/24.00p/23.98p): ALL-I Approx. 470 Mbps, IPB Approx. 120 Mbps

4K UHD (50/59.94p): ALL-I Approx. 940 Mbps, IPB Approx. 230 Mbps

4K UHD (29.97p/25p): ALL-I Approx. 470 Mbps, IPB Approx. 120 Mbps

Full HD (119.90p/100p): ALL-I: Approx. 360 Mbps

Full HD (59.94p/50.00p): ALL-I: Approx. 180 Mbps

Full HD (59.94p/50.00p): IPB Approx. 60 Mbps

Full HD (29.97p/25p): ALL-I: Approx. 90 Mbps

Full HD (29.97p/25p): IPB: Approx. 30 Mbps

Full HD (29.97p/25p): IPB light: Approx. 12 Mbps

# Canon Log on (H265 MP4)

4K DCI (50/59.94p): ALL-I Approx. 1000 Mbps, IPB Approx. 340 Mbps

4K DCI (29.97p/25.00p/24.00p/23.98p): ALL-I Approx. 470 Mbps, IPB Approx. 170 Mbps

4K DCI cropped (50/59.94p): ALL-I Approx. 1000 Mbps, IPB Approx. 340 Mbps

4K DCI cropped (29.97p/25p/24.00p/23.98p): ALL-I Approx. 470 Mbps, IPB Approx. 170 Mbps

4K UHD (50/59.94p): ALL-I Approx. 1000 Mbps, IPB Approx. 340 Mbps

4K UHD (29.97p/25p): ALL-I Approx. 470 Mbps, IPB Approx. 170 Mbps

Full HD (119.90p/100p): ALL-I: Approx. 470 Mbps

Full HD (59.94p/50.00p): ALL-I: Approx. 170 Mbps

Full HD (59.94p/50.00p): IPB Approx. 90 Mbps

Full HD (29.97p/25p): ALL-I: Approx. 135 Mbps

Full HD (29.97p/25p): IPB: Approx. 45 Mbps

Full HD (29.97p/25p): IPB light: Approx. 18 Mbps

#### Microphone

Built-in stereo microphones (48 kHz, 16-bit x 2 channels)

#### **HDMI Display**

External Monitor only, External Monitor only without information display or Simultaneous on camera and external monitor

#### **HDMI Output**

4K and Full HD recording, uncompressed YCbCr 4:2:0, 8-bit BT709, or YCbCr 4:2:2, 10-bit BT2020 with Canon Log sound output via HDMI is also possible

#### Focusing

Dual Pixel CMOS AF with Face Detection and Tracking AF, Movie Servo AF Manual Focus

#### ISO

100-25600 (in 1/3-stop increments) ISO can be expanded to or H1: 51200, H2: 102400, H3: 204800 (selected in Custom Function)

# **Movie Digital IS**

Yes, image area when enabled: reduced by 10%

# Other Features

#### **GPS**

Built in - Longitude, Latitude, Elevation, Coordinated Universal Time

- GPS satellites (USA)
- GLONASS satellites (Russia)
- Quasi-Zenith Satellite Michibiki (Japan)

#### **Custom Functions**

38 Custom Functions

#### **Metadata Tag**

Author, copyright, Image rating (0-5 stars) GPS, Rating, IPTC (registered with EOS Utility/browser remote)

# LCD Panel (EL) / Button Illumination

Yes/Yes

#### Water / Dust resistance

Yes

#### Voice Memo

# **Intelligent Orientation Sensor**

Yes

# Histogram

Brightness: Yes

RGB: Yes

# Playback zoom

1.5x - 10x

# **Display Formats**

- (1) Single image with information (2 levels)
- (2) Single image
- (3) 4 image index
- (4) 9 image index
- (5) 36 image index
- (6) 100 image index
- (7) Jump Display
- (8) Movie edit
- (9) Raw processing
- (10) Rating

# **Image Erase Protection**

Erase protection of one image at a time, folder or card

# **Image Erase**

Single image, selected, folder, card or all unprotected

#### **Self Timer**

2 or 10 sec.

## **Menu Categories**

- (1) Shooting Menu 1 4 (separate photo/video)
- (2) AF menu 1 5
- (3) Network 1
- (4) Playback menu 1 3
- (5) Setup menu 1-5
- (6) Custom functions 1-9
- (7) My Menu (1-5 user selectable)

#### Menu Languages

English, German, French, Dutch, Danish, Portuguese, Finnish, Italian, Norwegian, Swedish, Spanish, Greek, Russian, Polish, Czech, Hungarian, Romanian, Ukraine, Turkish, Arabic, Thai, Simplified Chinese, Traditional Chinese, Korean, Indonesian, Malaya and Japanese.

#### **Firmware Update**

Update possible by the user. (Camera, Lens, WFT, External Speedlite)

#### **Body Materials**

Magnesium Alloy

# Interface

#### Computer

USB 3.1 Gen 2 (PTP)

Wi-Fi

Wireless LAN (IEEE802.11b/g/n) (2.4 GHz only), with Bluetooth support<sup>5</sup> Features supported - EOS Utility, Smartphone, Upload to Web

#### Other

HDMI (mini), External microphone (Stereo mini jack) Headphone Jack, RJ-45, N3 remote release terminal, Flash PC connector

# **Memory Card**

#### **Type**

CFexpress 1.0 Type B

# **Supported Operating System**

#### PC

Windows 8.1 and Windows 10 (tablet mode not supported)

#### Macintosh

Mac OS 10.14 (Mojave)

Mac OS 10.13 (High Sierra)

Mac OS 10.12 (Sierra)

OS X 10.11 (El Capitan)

# Software

#### Other

EOS Utility 3, Picture Style Editor, WFT utility, Camera connect app (iOS/Android)

#### **Image Manipulation**

Digital Photo Professional 4, Digital Photo Professional Express for iPad (RAW Image Processing),

# **Power Source**

#### **Batteries**

Rechargeable Li-ion Battery LP-E19, LP-E4N

(LP-E19 battery supplied)

#### **Battery life**

Viewfinder shooting Approx. 2850 (at 20°C) 6

Viewfinder shooting Approx. 2360 (at 0°C) <sup>7</sup>

Live View shooting Approx. 610 (at 20°C) 8

Live View shooting Approx. 530 (at 0°C) <sup>9</sup>

4K movie recording Approx. 2 hr 20 mins (at 20°C) (movie Servo AF disabled)

### **Battery check**

Automatic displayed in 6 levels

#### Power saving

Power turns off after 1, 2, 4, 8, 15 or 30 mins.

#### **AC Power Supply**

Power adapter AC-E19/DR-E19

# Accessories

#### Lenses

All EF lenses (excludes EF-S lenses)

## Flash

Canon Speedlites (90EX, 220EX, 270EX, 270EX II, 320EX, 380EX, 420EX, 430EX, 430EX II, 430EX III, 470EX AI, 550EX, 580EX, 580EX II, 600EX-RT, 600EX, 600EX-II RT, EL 100, Macro-Ring-Lite MR-14EX, Macro-Ring-Lite, MR-14EX II, Macro Twin Lite MT-24EX, Speedlite Transmitter ST-E2, Speedlite Transmitter ST-E3-RT)

#### Remote Controller / Switch

Remote control with N3 type contact and Speedlite 600EX-II RT

# **Power Supply & Battery Chargers**

Battery Pack LP-E19, Battery Pack LP-E4N, Battery charger LC-E19, Power Adapter AC-E19/DR-E19

## Other

Wireless File Transmitter WFT-E9, Eyecup Eg, Eg-series Dioptric Adjustment Lens with Rubber Frame Eg, Anti Fog Eyepiece Eg, Angle Finder C, Hand Strap E1/E2