

# Clifton Cameras Product Specification

## Pentax K-3 Mark III Monochrome

### Specifications

#### Model Description

Type	TTL autofocus, auto-exposure SLR digital-still camera
Lens Mount	PENTAX KAF2 bayonet mount (AF coupler, lens information contacts, K-mount with power contacts)
Compatible Lens	KAF4, KAF3, KAF2 (power zoom compatible), KAF, KA mount lens

#### Image capture unit

Image Sensor	Monochrome, CMOS. Size: 23.3 x 15.5 (mm)
Effective Pixels	Approx. 25.73 megapixels
Total Pixels	Approx. 26.78 megapixels
Dust Removal	Image sensor cleaning using ultrasonic vibrations "DR II"
Sensitivity (Standard output)	ISO AUTO/200 to 1600000 (EV steps can be set to 1EV, 1/2EV or 1/3EV)
Image Stabilizer	Sensor-shift shake reduction "SR II"(5-axis), Auto/Panning/Off
AA Filter Simulator	Moiré reduction using SR unit. OFF/Low/High/Bracketing(2 images)/Bracketing (3 images)

#### File formats

File format	RAW (PEF/DNG), JPEG (Exif 2.3), DCF2.0 compliant
Recorded Pixels	JPEG:L(26M:6192x4128)、M(15M:4752x3168)、S(9M:3648x2432)、XS(2M:1920x1280) RAW:(26M:6192x4128)
Quality Level	RAW (14bit): PEF, DNG JPEG: ★★★ (Best), ★★ (Better), ★ (Good), RAW + JPEG simultaneous capturing available
Color Space	sRGB, AdobeRGB
Storage Medium	SD, SDHC and SDXC Memory Cards * UHS-1/UHS-II compatible (UHS-II is only available for the memory card inserted in the SD1 slot.)
Dual SD slot	Sequential Use, Save to Both, Separate RAW/JPG, Image copy between slots possible
Storage Folder	Folder Name: Date (100_1018,101_1019...) or User assigned folder name (Default "PENTX")
Recording File	File Name: "IMGP****" or User assigned file name File name numbering: Sequential, Reset

#### Viewfinder

Type	Pentaprism Finder
Coverage (FOV)	Approx. 100%
Magnification	Approx. 1.05x (FA 50mmF1.4 at infinity)
Eye-Relief Length	Approx. 20.5mm (from the view window), Approx. 22.0mm (from the center of lens)
Diopter adjustment	Approx. -4.0m to + 1.0m <sup>-1</sup>
Focusing Screen	Natural-Bright-Matte III focusing screen
Viewfinder Overlay	AF Points, Grid Display, Electronic Level, AF Frame, Spot Metering Frame, Crop, Smart Function, Operation Control Lock

#### Live view

Type	TTL method using image sensor
Focusing Mechanism	Contrast detection (Auto Area, Zone Select, Tracking, Select(L/M/S), Spot)
Functions	Focus Peaking, Face detection, Touch AF
Display	Field of View approx. 100%, Magnified view (up to 16x), Grid Display (4x4 Grid, Golden Section, Scale, Square(L), Square(S), Grid Color: Black/Gray/White ), Histogram, Bright area warning, Composition Adjustment

**LCD monitor**

Type	Wide viewing angle TFT color LCD, Air-gapless glass
Size	3.2 inch (aspect ratio 3:2)
Dots	Approx. 1620K dots
Touch Screen	Capacitive sensing method
Adjustment	Brightness, Saturation and Colors adjustable
Outdoor View Setting	Adjustable $\pm 2$ step
Night Vision LCD Display	ON/OFF

**Autofocus System**

Type	TTL: Phase-matching autofocus
Focus Sensor	SAFOX 13, 101 point (25 cross type focus points)
Brightness Range	EV-3 to 19 (ISO 200 / at normal temperature) *-3 EV is only available for AF points that support F2.8 light flux when an F2.8-light-flux compatible lens is attached.
AF mode	Single AF (AF.S), Continuous AF (AF.C)
AF Point Selection	Auto Area, Zone Select, Select, Expanded Area(S, M, L), Select(S), Select(XS), Spot
AF Assist Light	Dedicated LED AF assist light

**Metering**

Type	TTL open aperture metering using 307K pixel RGBIr sensor, Multi-segment, Center-weighted, Spot and Highlight-weighted
Metering Range	EV-2 to 21 (ISO200 at 50mm F1.4)
Exposure Mode	Scene Analyze Auto, Program, Sensitivity Priority, Shutter Priority, Aperture Priority, Shutter & Aperture Priority, Manual, Bulb, Flash X-sync Speed, USER1, USER2, USER3, USER4, USER5
EV Compensation	$\pm 5$ EV (1/2EV steps or 1/3EV steps can be selected)
AE Lock	Button type (timer type: two times the meter operating time set in Custom Setting); Continuous as long as the shutter button is halfway pressed

**Shutter**

Type	Electronically controlled vertical-run focal plane shutter / Electronic shutter
Shutter Speed	Mechanical shutter: Auto:1/8000 to 30 sec., Manual: 1/8000 to 30 sec. (1/3EV steps or 1/2EV steps), Bulb (Timed exposure setting possible from 1 sec. to 20min.) Electronic shutter: Auto:1/16000 to 30 sec., Manual: 1/16000 to 30 sec. (1/3EV steps or 1/2EV steps)

**Drive modes**

Mode Selection	Single Frame, Continuous (H, M, L), Bracketing (2, 3 or 5 frames), Depth of Field Bracketing, Motion Bracketing, Mirror-up, Multi-Exposure(Average/Additive/Bright), Interval Shooting, Interval Composite
Self-timer	12s, 2s
Remote Control	0s, 3s
Continuous Shooting	Max. approx. 12 fps, JPEG ( L: ★★★ at Continuous H): up to approx. 55 frames, RAW: up to approx. 32 frames, RAW+: up to approx. 30 frames Max. approx. 7.0 fps, JPEG L: ★★★ at Continuous M): up to approx. 100 frames, RAW: up to approx. 40 frames, RAW+: up to approx. 33 frames Max. approx. 2.5 fps, JPEG ( L: ★★★ at Continuous L): up to approx. 100 frames, RAW: up to approx. 100 frames, RAW+: up to approx. 65 frames * The number of images captured in the continuous shooting mode is an approximate figure, tested at a sensitivity of ISO 200. The number may vary depending on the type of memory card used and/or the photographic conditions. * The continuous shooting speed may decrease depending on the type of lens used and/or the aperture, shutter speed and sensitivity selected by the user. * A certain amount of time is required for the playback of images captured in the continuous shooting mode. The time required may vary depending on the number of captured images and/or the recording format.

**External Flash**

Flash Modes	Auto Flash Discharge, Auto Flash + Red-eye Reduction, Flash On, Flash On + Red-eye Reduction, Slow-speed Sync, Slow-speed Sync + Red-eye, P-TTL, Contrast-control-sync, High-speed sync, Wireless sync * Contrast-control-sync and High-speed sync requires 2 or more dedicated external flash
Sync Speed	1/200sec.
Flash Exposure Compensation	-2.0~+1.0EV

**Capture Settings**

Custom Image	Standard, Hard, Soft
Digital Filter	Toy Camera, Retro, High Contrast, Shading, Invert Color, Tone Expansion, Grainy Monochrome
Clarity	Adjustable $\pm 4$ step
HDR	Auto, HDR1, HDR2, HDR3, Advanced HDR, Exposure bracket value adjustable, Automatic composition correction function
Lens Correction	Distortion Correction, Peripheral Illumin. Correction, Diffraction Correction
D-Range Correction	Highlight Correction, Shadow Correction
Noise Reduction	Slow Shutter Speed NR, High-ISO Noise Reduction
ASTROTRACER	Type 1, Type 2, Type 3 *Type 1 and Type 2 available with O-GPS1/O-GPS2(Optional)
Horizon Correction	SR On: correction up to 1 degrees, SR Off: correction up to 2 degrees
Composition Adjustment	Adjustment range of $\pm 1.5$ mm up, down, left or right ( $\pm 1$ mm when rotated); Rotating range of $\pm 1$ degree
Electronic Level	Displayed in viewfinder (Horizontal and vertical); Displayed on LCD monitor (Horizontal and vertical)
Program Line	AUTO, Normal, Hi-speed Priority, DOF Priority (Deep), DOF Priority (Shallow), MTF Priority

**Movie**

File Format	MPEG-4 AVC/H.264(MOV)
Recorded Pixels	4K(3840x2160, 30p/24p) Full HD(1920x1080, 60p/30p/24p)
Sound	Built-in stereo microphone, external microphone (Stereo recording compatible) Recording Sound Level adjustable, Wind Noise Reduction
Recording Time	Up to 25 minutes or 4GB ; automatically stops recording if the internal temperature of the camera becomes high.
Custom Images	Standard, Hard, Soft
Digital Filter	Retro, High Contrast, Invert Color

**Playback**

Playback View	Single frame, Multi-image display (20, 48, 70 segmentation), Display magnification (up to 16, 100% display, quick zoom and Focus Magnification available), Grid display (4x4 Grid, Golden Section, Scale, Square(L), Square(S), Grid Color: Black/Gray/White), Rotating, Histogram Bright area warning, Auto Image Rotation, Detailed information, Copyright Information (Photographer, Copyright holder), GPS information (latitude, longitude, altitude, Coordinated Universal Time) , Orientation, Folder Display, Calendar Filmstrip Display
Delete	Single image, All images, Selected images, Folder, Images on the selected shooting date, Instant review image
Digital Filter	Base Parameter Adj, Toy Camera, Retro, High Contrast, Shading, Invert Color, Tone Expansion, Grainy Monochrome, Miniature, Soft, Fish-eye, Slim,-Frame Composite
RAW Development	RAW file select: Select Single Image, Select Multiple Images, Select a folder, Select a shooting date RAW Development Parameter: Custom Image, Sensitivity, Digital filter, Clarity, HDR, Distortion Correction, Peripheral Illumin. Corr., Diffraction Correction, High-ISO Noise Reduction, Shadow Correction, File Format (JPEG/TIFF), JPEG Recorded Pixels, JPEG Quality, Aspect Ratio, Color Space
Edit	Protect, Image Rotation, Image Copy, File Transfer, Save RAW Data in buffer memory, Resize, Cropping (Aspect ratio and Slant adjustment available), Levels Adjustment, Movie Edit (Divide or delete selected frames), Capturing a JPEG still picture from a movie

**Customization**

Settings	USER Mode, Fx Button, AF/AE Lock Settings, Preview Dial, E-Dial Programming, Smart Function, Monitor Touch Operation, Eye Sensor, Viewfinder Display, LCD Panel, Monitor Display, Instant Review, Zoom Review, Warning Display, Control Panel, Memory, EV Steps, ISO Sensitivity Steps, Input MF Lens Focal Length, Save Rotation Information, Aperture Information Record, AF Fine Adjustment, Copyright Information
Language	English, French, Germany, Spanish, Portuguese, Italian, Dutch, Danish, Swedish, Finnish, Polish, Czech, Hungarian, Turkish, Greek, Russian, Thai, Korean, Traditional Chinese, Simplified Chinese, Japanese

**Power supply**

Battery Type	Rechargeable Lithium-ion Battery D-LI90
AC Adapter	AC Adapter Kit K-AC166(Optional)
Battery Life	Number of recordable images: Approx. 800 images Playback time: Approx. 250 minutes * With a fully-recharged Rechargeable Lithium-ion Battery. Tested in compliance with CIPA standard. Actual results may vary depending on the shooting condition.

**Interfaces**

Connection Port	USB Terminal(USB Type-C), External cable switch terminal(2.5mm diameter), X-sync socket, HDMI output terminal (Type D) , Stereo microphone input terminal, Headphone terminal
USB Connection	USB 3.2 Gen1, Data Transfer: MTP/CD-ROM, Battery Recharge/Power Supply (Optional AC Adapter required)

**Wireless LAN**

Standards	IEEE 802.11b/g/n
Frequency (Center Frequency)	2412MHz~2462MHz (1ch~11ch)
Security	Authentication: WPA2, Encryption: AES

**Bluetooth**

Standards	Bluetooth® v4.2 (Bluetooth Low Energy)
Frequency (Center Frequency)	2402MHz~2480MHz (CH0~CH39)

**Dimensions and Weight**

Dimensions	Approx. 134.5mm (W) x103.5mm (H) x 73.5mm (D) (excluding protrusions)
Weight	Approx. 820g (Including dedicated battery and SD Memory Card), Approx. 735g (body only)

**Operating Environment**

Temperature	-10°C~40°C (14°F~104°F)
Humidity	85% or less (no condensation)

**Accessories**

Included	Strap O-ST162, ME Viewfinder Cap, Rechargeable Lithium-ion Battery D-LI90, USB Power Adapter, Power Plug, USB Cable I-USB166 <Mounted to the camera> Eyecup FU, Hot shoe cover FK, Sync socket 2p cap, Body mount cap KII, Battery Grip terminal cover
Software	Digital Camera Utility 5