

Clifton Cameras Specifications Sheet

For the

Pentax K-70 Digital SLR

Model Description	
Type	TTL autofocus, auto-exposure SLR digital-still camera with built-in retractable P-TTL flash
Lens Mount	PENTAX KAF2 bayonet mount (AF coupler, lens information contacts, K-mount with power contacts)
Compatible Lens	KAF4, KAF3, KAF2 (power zoom not compatible), KAF, KA mount lens
Image capture unit	
Image Sensor	Primary color filter, CMOS. Size: 23.5 x 15.6 (mm)
Effective Pixels	Approx. 24.24 megapixels
Total Pixels	Approx. 24.78 megapixels
Dust Removal	SP coating and CMOS sensor operations
Sensitivity (Standard output)	ISO AUTO/100 to 102400 (EV steps can be set to 1EV, 1/2EV or 1/3EV)
Image Stabilizer	Sensor-shift Shake Reduction
AA Filter Simulator	Moiré reduction using SR unit. OFF/Type1/Type2/Bracket (3 frames)
File formats	

File format	RAW (PEF/DNG), JPEG (Exif 2.3), DCF2.0 compliant
Recorded Pixels	JPEG: L(24M:6000x4000), M(14M:4608x3072), S(6M:3072x2048), XS(2M:1920x1280) RAW: (24M:6000x4000)
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 Card (Conforms to UHS-I standards)
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. 0.95x (50mmF1.4 at infinity)
Eye-Relief Length	Approx. 20.5mm (from the view window), Approx. 22.3mm (from the center of lens)
Diopter adjustment	Approx. -2.5m to + 1.5m ⁻¹
Focusing Screen	Interchangeable Natural-Bright-Matte III focusing screen
Live view	
Type	TTL method using image sensor
Autofocus	Hybrid AF (Image plane phase-matching and Contrast detection) AF area: Face detection, Tracking, Multiple AF points, Select, Spot Focus Peaking: ON/OFF

Display	Field of View approx. 100%, Magnified view (up to 16x), Grid Display (4x4 Grid, Golden Section, Scale display, Square 1, Square 2, Grid Color: Black/White), Histogram, Bright area warning
LCD monitor	
Type	Vari-angle TFT color LCD monitor featuring an air-gapless structure, tempered-glass front panel
Size	3.0 inch (aspect ratio 3:2)
Dots	Approx. 921K dots
Adjustment	Brightness, Saturation and Colors adjustable
Outdoor View Setting	Adjustable ± 2 step
Night Vision LCD Display	ON/OFF
White Balance	
Type	TTL method using image sensor
White Balance	AUTO WB, Multi Auto WB, Daylight, Shade, Cloudy, Fluorescent Light (D:Daylight Color, N:Daylight White, W:Cool White, L:Warm White), Tungsten Light, CTE, Manual WB (up to 3 settings), Color Temperature Configuration (up to 3 settings), Copying the white balance setting of a captured image
Fine Adjustment	Adjustable ± 7 steps on A-B axis or G-M axis
Autofocus System	
Type	TTL: Phase-matching autofocus
Focus Sensor	SAFOX X, 11 points (9 cross type focus points in the center)
Brightness Range	EV-3 to 18 (ISO 100 / at normal temperature)
AF mode	Single AF (AF.S), Continuous AF (AF.C), Auto select AF (AF.A)

AF Point Selection	Auto:11 points, Auto:5 points, Select, Expanded Area Select, Spot
AF Assist Light	Dedicated LED AF assist light
Metering	
Type	TTL open aperture, 77 segmented metering, center-weighted and spot metering
Metering Range	EV0 to 22 (ISO100 at 50mm F1.4)
Exposure Mode	Auto Picture mode (Standard, Portrait, Landscape, Macro, Moving Object, Night Scene Portrait, Sunset, Blue Sky, Forest), Scene Mode (Portrait, Landscape, Macro, Moving Object, Night Scene Portrait, Sunset, Blue Sky, Forest, Night Scene, Night Scene HDR, Night Snap, Food, Pet, Kids, Surf & Snow, Backlight Silhouette, Candlelight, Stage Lighting, Museum), Program, Sensitivity Priority, Shutter Priority, Aperture Priority, Shutter & Aperture Priority, Manual, Bulb
EV Compensation	±5EV (1/2EV steps or 1/3EV steps can be selected)
AE Lock	Can be assigned to the AF/AE-L button
Shutter	
Type	Electronically controlled vertical-run focal plane shutter * Electronic shutter when using Pixel Shift Resolution
Shutter Speed	Auto:1/6000 to 30 sec., Manual: 1/6000 to 30 sec. (1/3EV steps or 1/2EV steps), Bulb (Timed exposure setting possible from 10 sec. to 20min.)
Drive modes	

Mode Selection	<p>[Still Image] Single Frame, Continuous (H, L), Self-timer (12s, 2s, Continuous), Remote Control (0s., 3s., Continuous), Bracketing (2, 3 or 5 frames), Mirror-up, Multi-Exposure, Interval Shooting, Interval Composite, Interval Movie Record, Star Stream</p> <p>[Movie] Remote Control</p> <p>* Bracketing, Interval Shooting, Interval Composite, Interval Movie Record and Star Stream are possible to use with Self-timer/Remote Control</p> <p>* Mirror-up is possible to use with Self-timer</p> <p>* Multi-Exposure is possible to use with Continuous Shooting, Self-timer or Remote Control</p>
Continuous Shooting	<p>Max. approx. 6.0 fps, JPEG (L: ★★★ at Continuous H): up to approx. 40 frames, RAW: up to approx. 10 frames, RAW+: up to approx. 8 frames</p> <p>Max. approx. 3.0 fps, JPEG L: ★★★ at Continuous L): up to approx. 100 frames, RAW: up to approx. 16 frames, RAW+: up to approx. 11 frames</p> <p>*ISO100</p>
Multi-Exposure	<p>Composite Mode(Additive/Average/Bright)</p> <p>Number of Shots(2 to 2000 times)</p>
Interval Shooting	<p>[Interval Shooting] Interval: 2s. to 24h./ Standby Interval: Min. · 1s. to 24h., Number of shots: 2 to 2000 times, Start Interval: Now/Self-timer/Remote Control/Set Time</p> <p>[Interval Composite] Interval: 2s. to 24h./ Standby Interval: Min. · 1s. to 24h., Number of shots: 2 to 2000 times, Start Interval: Now/Self-timer/Remote Control/Set Time, Composite Mode: Additive/Average/Bright, Save Process: ON/OFF</p> <p>[Interval Movie] Recorded Pixels: 4K/FullHD/HD, File Format: Motion JPEG (AVI), Interval:2s. to 24h./ Standby Interval: Min · 1s. to 24h., Number of shots: 8 to 2000 times (8 to 500 times at 4K), Start Interval:Now/Self-timer/Remote Control/Set Time</p> <p>[Star Stream] Recorded Pixels: 4K/FullHD/HD, File Format: Motion JPEG (AVI), Interval:2s. to 24h./ Standby Interval: Min · 1s. to 24h., Number of shots: 8 to 2000 times (8 to 500 times at 4K), Start Interval: Now/Self-timer/Remote Control/Set Time, Fade-out: OFF/Low/Medium/High</p>
Flash	

Built-in Flash	Built-in retractable P-TTL flash, GN: approx. 12 (ISO100/m), Angle of view of 28mm lens (35mm format equivalent)
Flash Modes	Auto Flash Discharge, Auto Flash + Red-eye Reduction (Auto Picture, Scene) Flash On, Flash On+ Red-eye Reduction, Slow-speed Sync, Trailing Curtain Sync, Manual Flash Discharge (Full-1/128)
Sync Speed	1/180sec.
Flash Exposure Compensation	-2.0~+1.0EV
External Flash	P-TTL, Leading Curtain Sync, Trailing Curtain Sync, Contrast-control-sync, High-speed sync, Wireless sync * Contrast-control-sync and High-speed sync requires two or more dedicated external flash
Capture Settings	
Custom Image	Auto Select, Bright, Natural, Portrait, Landscape, Vibrant, Radiant, Muted, Flat, Bleach Bypass, Reversal Film, Monochrome, Cross Processing
Cross Process	Random, Preset 1-3, Favorite 1-3
Digital Filter	Extract Color, Replace Color, Toy Camera, Retro, High Contrast, Shading, Invert Color, Unicolor Bold, Bold Monochrome
Clarity	Adjustable ± 4 step
Skin Tone	Type1, Type2, OFF
HDR	Auto, HDR1, HDR2, HDR3, Advanced HDR, OFF, Exposure bracket value adjustable, Automatic composition correction function
Pixel Shift Resolution	Motion Correction ON, Motion Correction OFF, OFF
Lens Correction	Distortion Correction, Peripheral Illumin. Correction, Lateral Chromatic Aberration Correction, Diffraction Correction
D-RANGE Compensation	Highlight Correction, Shadow Correction
Noise	Slow Shutter Speed NR, High-ISO NR

Reduction	
Horizon Correction	SR On: correction up to 1 degrees, SR Off: correction up to 1.5 degrees
Electronic Level	Displayed in viewfinder : Horizontal direction only, Displayed on LCD monitor: Horizontal and vertical direction
Movie	
File Format	MPEG-4 AVC/H.264 (MOV)
Recorded Pixels	Full HD(1920x1080, 60i/50i/30p/25p/24p) HD (1280x720, 60p/50p)
Auto Focus	Hybrid AF (Image plane phase-matching and Contrast detection) AF mode: Single AF (AF.S), Continuous AF (AF.C) * Continuous AF (AF.C) is available with the dedicated lens. AF area: Multiple AF points, Select, Spot Focus Peaking: ON/OFF
Sound	Built-in stereo microphone, external microphone (Stereo recording compatible) Recording Sound Level adjustable
Recording Time	Up to 25 minutes or 4GB ; automatically stops recording if the internal temperature of the camera becomes high.
Custom Images	Auto Select, Bright, Natural, Portrait, Landscape, Vibrant, Radiant, Muted, Flat, Bleach Bypass, Reversal Film, Monochrome, Cross Processing
Cross Processing	Random, Preset 1-3, Favorite 1-3.
Digital Filter	Extract Color, Replace Color, Toy Camera, Retro, High Contrast, Shading, Invert Color, Unicolor Bold, Bold Monochrome
Playback	
Playback View	Single frame, Multi-image display (6,12, 20, 35, 80 segmentation), Display magnification (up to 16x, Quick Zoom view available), Grid display (4x4 Grid, Golden Section, Scale display, Square 1, Square 2, Grid Color: Black/White), Rotating, Histogram (Y histogram, RGB 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, Slide Show,
Delete	Delete single image, delete all, select & delete, delete folder, delete instant review image
Digital Filter	Base Parameter Adj, Extract Color, Replace Color, Toy Camera, Retro, High Contrast, Shading, Invert Color, Unicolor Bold, Bold Monochrome, Tone Expansion, Sketch, Water Color, Pastel, Posterization, Miniature, Soft, Starburst, Fish-eye, Slim, Monochrome
RAW Development	RAW file select : Select Single Image, Se