RICOH
imagine. change.

WG-90

The digital compact camera for tough applications: Under water, at work, in sports or in leisure time

	ART. CODE	EAN
PENTAX WG-90 BLACK	02135	0027075306400
PENTAX WG-90 BLUE	02144	0027075306493

This standard-class waterproof digital compact camera is designed so that anyone can capture the fun and excitement of various outdoor activities more casually and effortlessly, and without worries.

Despite its compact, lightweight body, the WG-90 offers outstanding basic specifications that outperform ordinary digital cameras and smartphones under demanding outdoor conditions. It is waterproof to a depth of 14meters; shockproof against a fall from a height of 1.6 meters; and freeze-proof against temperatures as low as -10°C.

It also features a six-LED Macro Lights unit whose maximum illumination intensity has been upgraded to almost twice that of its predecessor. This unit even allows the photographer to adjust the illumination level for improved operability in close-range photography.

- 16 Megapixel Backside Illuminated 1/2.3" CMOS sensor

- 28-140mm zoom lens (equivalent in 35mm format)

- Sturdy and robust body construction (waterproof up to 14 meters, for up to two hours, old-resistant to -10°C, shockproof to 1.6 m and breakproof to 100 kg)

- Macro function with digital microscope function from 1 cm shooting distance

- Six LED lights for macro shooting and selfie mode, with variable light intensity

- Digital zoom and Intelligent Zoom function up to a total focal length of 1,008 mm (equivalent in 35mm format)

- Multiple electronic "Shake Reduction" to prevent blurred shots25 scene modes for a wide range of shooting situations

- Underwater shooting mode, specifically designed for underwater photography

- Full HD video with 30 frames/second in H.264 format

- Face detection for up to 32 faces, with automatic shutter release when a smile is detected, and closed-eye warning

- Macro stand (included) to maintain a minimum focusing distance of one centimeter

- Receiver for the optional IR remote control on the front and back of the camera

- Outdoor-friendly Style Watch function to display the time on the LCD monitor, using an extended push of the OK button when the camera's power is turned off

Kit Accessories

RECHARGEABLE LI-ION BATTERY D-LI92	39800	0027075049116
POWER ADAPTER	NO INDIVIDUAL SALES	
POWER PLUG	NO INDIVIDUAL SALES	
USB CABLE-USB157	37019	0027075288515
CARABINER STRAP O-ST104	39857	0027075183285
MACRO STAND O-MS1	39004	0027075188860

Optional Accessories

PROTECTOR JACKET O-CC1252	39986	0027075216303
REMOTE CONTROL O-RC1	39892	0027075183513

Packaging

SIZE	175 (W) x (H) 138 x (D) 83mm
WEIGHT	493,1gr

Launching Date

NOVEMBER 2023

PENTAX WG-90

CAMERA TYPE
TYPE — Water protected Digital compact camera for movie and photo

SENSOR
TYPE — 1/2.3" CMOS
PIXELS — Effective: approx. 16 megapixels
SENSITIVITY — STANDARD OUTPUT: AUTO, Manual (ISO 125 - 6400)
MOTION BLUR REDUCTION — Still: Pixel Track SR, Digital SR modeby automatically increasing sensitivity up to ISO 6400
Video: Movie shake reduction mode (Movie SR)
WHITE BALANCE — Auto, Daylight, Shade, Cloudy, Tungsten light, Fluorescent light(D:Daylight Color, N:Daylight White, W:White Light), Ring light, Manual
DYNAMIC RANGE — Shadow/Highlight adjustment
NOISE REDUCTION — Automatically applied when the shutter speed is slower than 0.25 s

FILE FORMATS
STILL — JPEG (conforms to Exif 2.3), conforms to DCF2.0, PRINT Image Matching III
RECORDED PIXELS — STILL: Size: 16MP, 12MP (1:1), 12MP(16:9), 7MP, 5MP(16:9), 5MP, 4MP(16:9), 3MP, 2MP(16:9), 1024, 640
Selection limited by mode
QUALITY LEVEL — STILL: ★★★, ★★, ★,
STORAGE MEDIA — SD/SDHC/SDXC Memory Card
BUILT-IN MEMORY — Approx. 68MB,

LENS
FOCAL LENGTH — 5 - 25mm
35MM FORMAT EQUIVALENT — Approx. 28 - 140mm
MAXIMUM APERTURE — F3.5(W) – F5.5(T)
CONSTRUCTION — 11 elements in 9 groups (5 aspherical elements)
OPTICAL ZOOM — 5x
DIGITAL ZOOM — Approx. 7.2x
INTELLIGENT ZOOM — Approx. 7.5X at 7M, approx. 36X at 640 (including optical zoom)
MAXIMUM MAGNIFICATION — Approx. 0.4x (1cm Macro)

AUTO FOCUS SYSTEM
TYPE — 9-point AF, Spot AF, Auto tracking AF,
FOCUS RANGE — Standard: 0.5m - infinity / 1.64ft. - infinity (entire zoom range)
Macro:0.1 - 0.6m / 0.33 - 1.97ft. (entire zoom range)
1cm Macro:0.01 - 0.3m / 0.03 - 0.98ft. (middle zoom position)
Infinity-landscape, Pan Focus, Manual Focus: available
MANUAL FOCUS RANGE — 0.01m - infinity (Depends on the zooming steps. 0.01m is only available in 2 - 4 zoom step.)
FACE DETECTION — Face Detection AF&AE is available for all modes up to 32 faces. Smile Capture, Self-portrait Assist, Self-portrait Assist + Smile Capture, Blink Detection
PET DETECTION — Detect up to 1 pet's face(auto)
AF ASSIST LAMP — available

EXPOSURE CONTROL
METERING SYSTEM — Multi-segment metering, Center-weighted metering, Spot metering
SHUTTER SPEED — 1/4000 - 1/4sec.(Mechanical and electronic shutter),
4sec at most. (Night Scene mode setting)
EV COMPENSATION — ± 2EV (1/3EV steps)
SCENE MODE — Auto Picture, Program, HDR, Handheld Night Snap, Movie, High Speed Movie, Digital Microscope, Landscape, Flower, Portrait, Underwater, Underwater Movie, Interval Shot, Interval Movie, Surf & Snow, Kids, Pet, Sport, Night Scene, Night Scene Portrait, Fireworks, Food, Digital SR, Report, Green
SELF TIMER — 10 sec., 2 sec., OFF

CAPTURE SETTING
IMAGE TONE — Bright, Natural, Vibrant, Slide Film, Monochrome, Cross Processing
DIGITAL MICROSCOPY — 1 cm macro: 0.01 - 0.3 m (centre zoom position), LED ring light: Six LED macro lamps are positioned around the lens, with five-level intensity adjustment, ensuring bright, even illumination of the subject, at close range and in digital microscope mode
SELFIE-MODE — The six elements of the ring light help to align the face in selfie mode. Automatic triggering when a smile is detected, and warning when eyes are closed

DISPLAY
TYPE — 2.7" Wide LCD, approx. 230K dots, AR Coating(Cover only),
With outdoor mode to adjust the brightness of the monitor for the respective lighting conditions

SHOOTING FEATURES
DRIVE MODES — One shot, Self-timer, Continuous Shooting, Burst Shooting, M Continuous, S Continuous, Remote Control, Auto Bracketing
CONTINUOUS SHOOTING — Approx. 1.08 frame/sec., max 69 # of frames

BUILT-IN FLASH
MODES — Flash-on and Flash-off modes.
"Red-eye" compensation function employs a pre-discharge.
FLASH RANGE — Wide:approx. 0.2 - 5.5m / 0.66 - 18 ft. (ISO Auto)
Tele:approx. 0.2 - 3.5m / 0.66 - 11 ft. (ISO Auto)
UNDERWATER FLASH MODE — This flash setting takes two pictures in succession with (flash off) and (flash on). This mode prevents the fish from fleeing when the flash fires immediately
6 LED RING LIGHTS — Single touch Ring light mode, Bright Illumination
Able to adjust amount of light by 10 steps
Able to select which LED should be lighted by 5 patterns
Macro shooting from 1cm

MOVIE
FILE FORMAT — MPEG-4 AVC/H.264
NUMBER OF RECORDED PIXELS — 1920（1920 x 1080）: approx. 30fps,
1280 (1280 x 720): approx. 60/30fps
AUDIO — 【Movie/Underwater Movie】32KHz, 16bit, monaural
【High Speed Movie】8KHz, 16bit, monaural
SHAKE REDUCTION — Movie shake reduction mode (Movie SR)
MOVIE EDIT FUNCTIONS — Save as still image, Divide Movies, Adding title picture

PLAYBACK
PLAYBACK FUNCTIONS — One Shot, Index (6 thumb nails, 12 thumb nails), Enlargement (up to 10X, scroll available), Movie Playback, Histogram, Folder display, Select&Delete, Calendar
PLAYBACK MODES — Slideshow, Image Rotation, Small Face Filter, Ink Rubbing Filter, Collage, Digital Filter(B&W / Sepia, Toy Camera, Retro, Color, Extract Color, Color Emphasis, High Contrast, Starburst, Soft, Fish-eye, Brightness, Miniature), HDR Filter, Original Frame, Movie Edit, Red-eye Edit, Resize, Cropping, Image Copy, Protect, Start-up Screen
DIGITAL FILTER — B&W / Sepia, Toy Camera, Retro, Color, Extract Color, Color Emphasis, High Contrast, Starburst, Soft, Fish-eye, Brightness, Miniature Filter

CUSTOMAZATION
LANGUAGES — English, French, Germany, Spanish, Portuguese, Italy, Dutch, Japanese, Danish, Swedish, Finnish, Polish, Czech, Hungarian, Turkey, Greek, Russian, Thai, Korean, Simplified Chinese, Traditional Chinese

SPECIAL
WORLD TIME — Supported
DATE IMPRINT — Date Imprint Available (Date, Time, Date & time) (except Green)
START-UP TIME — Approx. 1.5 sec (TBD)
RELEASE TIME LAG — Approx. 0.008 sec.
WATER PROOF — Up to 14m (45ft.) for 2 hours
Equivalent to JIS Class 8 waterproof
DUSTPROOF — IP6X / JIS Class 6 dustproof capabilities
SHOCK PROOF — Up to 1.6m (5.2ft.)
OPERATING TEMPERATURE — −10°(14°F) to 40°(104°F)

POWER SUPPLY
POWER SOURCE — Rechargeable lithium-ion battery D-LI92
BATTERY LIFE — Still*: approx. 300 shots (Rechargeable Lithium-ion battery)
Playback**: approx. 260 min. (Rechargeable Lithium-ion battery) (TBD)
Movie: approx. 90 min. ** (TBD)
* Recording capacity shows approximate number of shots recorded during CIPA-compliant testing. Actual performance may
vary depending on operating conditions.
** According to the result of RICOH IMAGING in-house testing.
BATTERY CHARGE TIME — Approx. 120 min.

INTERFACES
USB2.0(Micro-B), HDMI output terminal(Type D)

DIMENSIONS & WEIGHT
DIMENSIONS — Approx. 122.5 (W) x 61.5 (H) x 29.5mm (D) /4.8 (W) x 2.4 (H) x 1.2inches (D) (including lens depth)
WEIGHT — Approx. 193g / 6.8 oz. (loaded and ready)
Approx. 173g / 6.1oz. (without battery and SD memory card)

SYSTEM REQUIREMENTS
PC — Windows® 10, 11
MAC — MAC OS 11, OS 12, OS 13