

MONOCAM™ MV-14P PINNACLE® Digital Camera Kit

The MONOCAM™ is a **REVOLUTIONARY NEW NIGHT VISION CAMERA SYSTEM** that converts a PVS-14 or MV-14 type night vision monocular into a light weight, easy to use digital night vision surveillance and security camera. Originally designed for rugged military use, the **WATERPROOF, FREEZEPROOF, SHOCKPROOF & DUSTPROOF** MONOCAM™ Night Vision Camera Adapter Kit combines the latest developments in digital camera technology with the best in U.S. manufactured night vision technology. At the heart of the kit is the patented MONOCAM™ Night Vision Adapter, constructed of machine aircraft-grade anodized matte finished aluminum, providing the connection between the night vision monocular and the Olympus Stylus Tough-8010 Camera. The resulting light weight camera system allows the user to easily manipulate objective and dioptic focusing, and other important camera features making it the perfect tool for night time law enforcement and security operations that require image capturing.

The MONOCAM™ is the perfect tool for night time operations where “ease-of-use” and “quick-readiness” are determinative factors in gathering critical information on target objectives or subject evidence collection. The MONOCAM™ utilizes a PVS-14 or MV-14 type monocular, the super tough shockproof, waterproof and freezeproof Olympus Stylus Tough-8010 Digital Camera, and the light weight patented MONOCAM™ Adapter and rubber bushing.

The MONOCAM™ features a ¼” tripod mount and a two-bar rail mount on top for mounting an optional IR Illuminator or Laser Aiming Device. Already in use by the U.S. military, the MONOCAM™ sets a new standard for “ease-of-use” and “quick-readiness” night vision camera systems.



PART #: MVC-52012

MONOCAM™ Standard Accessories:

- MONOCAM™ Camera Adapter - Made of anodized aircraft aluminum and specially designed to fit the Olympus Stylus Tough-8010 Digital Camera
- MONOCAM™ Rubber Bushing
- Olympus Stylus Tough-8010 Camera – The Shockproof, Waterproof, Freezeproof and Dustproof Stylus Tough-8010 gives active people the confidence to take this camera anywhere and shoot in nearly any condition
- MV-14P PINNACLE® Generation 3 Night Vision Monocular

MOROVISION NIGHT VISION, INC.
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Photos taken with the MONOCAM Digital Camera Kit

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MV-14P Mini-Monocular Gen 3 PINNACLE®

Using a high performance ITT Generation 3, 64 lp/mm (Min) **PINNACLE®** image tube, the U.S. Military battle-proven MV-14P provides exceptional quality image resolution under varying light conditions. The innovative mil-spec housing is extremely lightweight, weighing only 9.2 oz and can be submerged to depths up to 66 feet. The MV-14P operates using either one AA or one 3V lithium battery and includes a built in IR Illuminator for increased image clarity in low light situations. Standard accessories including a head mount assembly and a weapons mount make the versatile MV-14P required gear for all public safety and military applications.

Product Features:

- High resolution 64 lp/mm (Min), **PINNACLE®** high gain and high photoresponse in visible and near infrared
- Multifunctional: Hand-held, head-mounted or helmet-mounted as single eye goggle or weapons-mounted as night scope
- Built-in IR Illuminator
- Uses one AA or one 3V lithium battery
- Submersible up to 66 feet
- Comprehensive two-year warranty

Optional Accessories:

- 3x Mil-Spec Military Magnifier Lens
- 5x Mil-Spec Military Magnifier Lens
- 10x Magnifier Lens
- 3x/5x/10x Lens Adapter
- VIP IR Signal Beacon – Dual Function
- Laser Stick – Dual Function
- Guardian IR Flashing Marker
- Guardian IR Mockingbird™ Marker
- IR Illuminator- handheld
- MV-14 Camera Adapter
- Helmet Mount Assembly PASGT
- Helmet Mount Assembly MICH



Standard Accessories:

- **Head Mount Assembly** - Allows for hands-free operation. Accommodates the user's head size and eye positioning.
- **Weapons Mount** – Mounts the MV-14P to most all weapons.
- **Small, Medium and Large Brow Pads** - Changeable pads.
- **Helmet/Head Mount Adapter** - Attaches MV-14P to head mount assembly or helmet mount. Allows the user to position the monocular in front of either eye.
- **Eye Cups** - Prevents the emission of stray light or facial reflections.
- **Soft Carrying Case**- Provides convenient storage.
- **Lens Paper** - Used to lightly clean the objective and eyepiece glass surfaces.
- **Sacrificial Window** – Shields the optics from sand, air particles or anything that may scratch the lens.
- **Demist Shield** – Snaps onto the eyepiece to prevent condensation from forming on the optics.
- **Data Sheet** – System Test Data Sheet

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SPECIFICATIONS: MVP-MV14P

Intensifier Tube	Generation	3 U.S. (ITT PINNACLE®)
	Resolution	64 lp/mm (Min)
	Film	Auto-Gated
	Gate	Thin-Filmed
Optics	Magnification	1x
	Field of View	40°
	Objective Lens	F/1.2
	Eyepiece Lens	EFL 26mm
	Diopter Adjustment	+6 to -4 diopters
	Range of Focus	10" to infinity / 25cm to infinity ∞
Power	Power Source	One (1) AA battery or One (1) 3V Lithium CR123
	Operating Time	Approx. 40 hrs at room temp.
Environmental Characteristics	Operating Temperature	-40°C to +50°C
	Storage Temperature Range	-51°C to +85°C
Physical Characteristics	Size:	
	Length	4.2"
	Height	2.5"
	Width	2.0"
	Weight:	
	w/batteries	9.2 oz / 260 grams
Warranty	System	Two (2) years
Features	Weather Resistant	Yes
	Camera Adaptable	Yes
	IR Illuminator	Yes (built-in)

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OLYMPUS STYLUS TOUGH 8010 DIGITAL CAMERA

TAKE IT TO THE LIMIT. Attention adventure-seekers: this is the go-anywhere, do-anything camera you've been waiting for. It snaps stunning photos -- and records HD movies -- wherever you are. Hurling down a rugged trail. Plunging underwater. Balancing on your snowboard. The STYLUS TOUGH-8010 is engineered to thrive in any condition. **SHOCKPROOF, WATERPROOF, FREEZEPROOF, DUSTPROOF & CRUSHPROOF,** the Tough-8010 design gives tactical team members, law enforcement officers and similar professionals the confidence to take this camera anywhere and shoot in nearly any condition. Plus, the wide-angle lens lets users capture more of what they see. Perfect for SPECOPS, surveillance, and security as well as anyone with an active lifestyle.



FEATURES & BENEFITS:

Shockproof (6.6FT)

Accidents happen. A rugged metal body and revolutionary shock-absorbing construction are designed to withstand a 6.6-foot fall, drop or other mishap.

Waterproof (33FT)

Innovative waterproof seals and gaskets allow you to take underwater movies and amazing pictures in a pool, lake or ocean.

Freezeproof (14°F)

Perfect for skiing, snowboarding, sledding and other winter fun, this camera is winterized to perform at below-freezing temperatures.

Crushproof (220 LBF)

With a rugged body and reinforced LCD, the Stylus Tough-8000 withstands up to 220 pounds of pressure so your camera and images are protected.

Features & Benefits (cont'd):

2.7" Hypercrystal™ III LCD.

This large 2.7" LCD features an extra-wide viewing angle and anti-glare technology for easier composing and shooting even in direct, bright sunlight.

5x Optical Zoom + 5X Digital Zoom.

A wider field of view ensures you'll never miss anyone or anything in your shot. Great for shooting landscapes, underwater scenery, group portraits and amazing panoramic pictures.

The Olympus Stylus Tough-8010 Digital Camera is the perfect camera to use in combination with the MONOCAM™ camera adapter for convenient and "quick ready" night time surveillance.

Find the right MONOCAM™ from a number of different MONOCAM™ systems below. Or, if you already own a PVS-14 or MV-14 style monocular try the MONOCAM™ Adapter Kit.

MONOCAM™ NEPVS-14-17
MONOCAM™ MV-14P
MONOCAM™ MV-14
MONOCAM™ Adapter Kit

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Olympus Stylus Tough-8010 Specifications:

Shockproof	MIL-STD-810F Shock Equivalent (6.6ft/2m)
Waterproof	Equivalent to IEC60529 IPX8/JISC0920 (33ft/10m)
Freezeproof	MIL-STD-810F Low Temp Equivalent (-10oC/14oF)
Crushproof	220LBF
Image Sensor	14 Megapixels (effective), 1/2.3"
Focal Length/Lens Configuration	11 Lenses in 8 Groups, 4 Aspherical Lenses
Zoom	5x Optical Zoom + 5x Digital Zoom 5.0 – 25.0mm (28 – 140mm equivalent in 35mm photography)
Aperture Range	f3.5 (W) / f5.1 (T)
Display	2.7" HyperCrystal™ III LCD, 230,000 dots
Focus System	CCD Contrast Detection
Focus Range (from lens surface)	Normal mode: 23.6" – infinity (0.6m – infinity) Macro mode: Wide: 7.9" – infinity (0.2m – infinity); Tele: 19.7" – infinity (0.5m – infinity) Super Macro mode: 1.2" – 23.6" (0.03m – 0.6m), flash off
Focus Mode	iESP Auto, Spot AF, Face Detection AF, AF Tracking
Shutter Speed	1/2000 sec. - 1/4 sec. (up to 4 sec. in Night Scene mode)
ISO Sensitivity (SOS: Standard Output Sensitivity)	Auto, High Auto, 80, 100, 200, 400, 800, 1600 (equivalent)
Exposure Metering	Digital ESP Metering, Spot Metering, Face Detection AE (when Face Detection AF is selected)
White Balance Control	Auto, Presets (Daylight, Overcast, Tungsten and 3 Fluorescents)
Exposure Compensation	±2 EV steps in 1/3 EV steps
Image File Format	Still Image: JPEG Movie: MP4
Focus Range (from lens surface)	Normal mode: 23.6" – infinity (0.6m – infinity) Macro mode: Wide: 7.9" – infinity (0.2m – infinity); Tele: 19.7" – infinity (0.5m – infinity) Super Macro mode: 1.2" – 23.6" (0.03m – 0.6m), flash off
Motion Blur Suppression	Dual Image Stabilization

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Shooting Modes	29 Shooting Modes: Intelligent Auto, Program Auto, Sensor-Shift Image Stabilization, Panorama, Beauty Mode, Magic Filter, Scene Modes (1. PORTRAIT, 2. LANDSCAPE, 3. NIGHT SCENE, 4. NIGHT+PORTRAIT, 5. SPORT, 6. INDOOR, 7. CANDLE, 8. SELF PORTRAIT, 9. SUNSET, 10. FIREWORKS, 11. CUISINE, 12. DOCUMENTS, 13. BEACH & SNOW, 14. UNDERWATER SNAPSHOT, 15. UNDERWATER WIDE1, 16. UNDERWATER WIDE2, 17. UNDERWATER MACRO, 18. PET, 19. SNOW), HD Movie
Panorama	In-Camera Panorama, PC Panorama (Up to 10 frames automatically stitchable with ib software)
Continuous Shooting	High speed: 1.2 frames/second, up to the remaining card capacity (3 MP) Normal speed: 0.3 frames/second, up to the remaining card capacity (14 MP)
Shooting Assist Functions	Perfect Shot Preview, Histogram, Frame Assist, Voice Recording
Movie Mode	MPEG-4 Movie with Sound 720P: 1280 x 720, 30 frames per second (fps) VGA: 640 x 480, 30 fps QVGA: 320 x 240, 30 fps
Image Processing	TruePic™ III Image Processor
Pixel Mapping	14MP (4,288 x 3216) 8MP (3,264 x 2,448) 5MP (2,560 x 1,920) 3MP (2,048 x 1,536) 2MP (1,600 x 1,200) 1MP (1,280 x 960) VGA (640 x 480) 16:9 L (4,288 x 2,416) 16:9 S (1,920 x 1,080)
Image Playback	Still Image: Single, Index Display (4x3, 6x5), Collection, Event, Event-Play, Collection-Play, Collage, Up to 10x Enlargement, Slideshow, Rotation, Protection, Histogram, Voice Playback Movie: Normal, Fast-Forward, Reverse, Frame-by-Frame, Voice Playback
Playback Edit Effects	Still Image: Red-Eye Fix, Shadow Adjustment Edit, Beauty Fix, Resize, Cropping, Black & White, Sepia, Calendar, Saturation
Flash	Built-in
Flash Modes	Auto (for low light and backlit conditions) Red-Eye Reduction Fill-in Off
Self-Timer	12/2 Seconds
Memory	2 GB (1.6 GB for shooting)
Removable Media Card	SD/SDHC Card
Outer Connectors	Multi-Terminal (USB Connector, Audio/Video Output)
Auto-Connect USB	USB 2.0 High-Speed (USB Mass Storage)

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System Requirements	Auto-Connect USB: Windows® 2000 Professional/Windows XP/Windows Vista/Windows 7 with USB port, Mac OS X 10.3 or later with USB port Software: Windows® 2000 Professional/Windows XP/Windows Vista/Windows 7
Power Source	Li-ion Rechargeable Battery (LI-50B) F-2AC Adapter
Battery Life (CIPA DC-002)	Approximately 200 shots
Auto-Connect USB	USB 2.0 High-Speed (USB Mass Storage)
Dimension	3.9"W x 2.5"H x 0.94"D (98.3mm x 63.6mm x 23.9mm)
Weight	7.6oz (215g) without batteries and media card

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