APOLLO PRO

Thermal Imaging Clip-On System

The Apollo Pro family of Clip-on Thermal Imaging Devices represents Armasight's premier day/night thermal clip-on product displaying the best and latest in advancements developed by Armasight in the field of uncooled thermal imaging technology for the dismounted soldier, special law enforcement team member, and professional hunter. The Apollo Pro epitomizes Armasight's 20/50-design gold standard, which is defined from product inception as being capable of withstanding 20 meters immersion for 2 hours, and engineered for routine use with 0.50 BMG weapon shock and recoil. Based around common core electronics, signal processing, and infinity focused large-format collimating eyepiece, the Apollo Pro Series Day/ Night Clip-on Thermal Imaging Device is available in a variety of options and price points that cater to every application – military and commercial.

The Apollo Pro is a solid state, uncooled, long-wave infrared, 1X (unity magnification) Clip-on Thermal Imaging Device for day and night engagements. It mounts directly in front of the variable magnification sniper day sight without the need to remove the day sight from the weapon. Collateral applications of the Apollo Pro Thermal Imaging Device include functionality as a unity magnification (1x) stand-alone weapon sight and handheld uncooled thermal monocular. For the collateral duty functions, Armasight has included a compass and inclinometer in the Apollo Pro package for finer range estimation and target orientation. A five-button wireless remote switch is included to operate and modify the settings on the Apollo Pro to optimize the imagery for the viewed scene without having to remove your hands from the weapon. The Apollo Pro has Bluetooth© wireless capability and can directly interface with most smart phones with the potential for engaging a series of current and future applications.

Utilizing the latest FLIR Tau-2 Technology, the Apollo Pro is offered in 336x256 and 640x512 pixel formats. These options are further enhanced by professional military-grade 50mm and 100mm Germanium (Ge) objective lenses, creating a wide variety of range performance options optimize the user's experience with this magnified day sight.

Armasight has introduced a unique dual battery option for the Apollo Pro Clip-on Thermal Imaging Device, consisting either of four 3.0VDC 123A batteries (all oriented in the same direction to prevent confusion in replacement), or four 1.5VDC AA batteries pre-loaded in a cartridge. In a pinch, the Apollo Pro special power-management feature allows the use of a single 3.0VDC 123A battery for just over an hour.

The Apollo Pro uses the same 9-pin multi-pin connector to provide video-in imagery, where there may be a need for map or rangefinder display overlays, and external power access. In support of these capabilities, Armasight offers an optional laser range-finder, external battery pack, multispectral laser and other accessories designed to attach on the MIL-STD-1913 rail of the Apollo Pro to feed the desired overlay or input power into the Clip-on Thermal Imaging Device. The 9-pin connector is also capable of providing a portal for periodically upgrading the Apollo Pro software directly; as new revisions become available, users can download updates directly from the internet.

Apollo Pro weapon installation is easy, repeatable, and reliable based on a user-friendly MIL-STD-1913/ Weaver/Picatinny rail compatible, quick-release locking mechanism. This device is normally used in the "Reticule Off/ No Reticule" mode. However, when used in the collateral role of a 1X stand-alone weapon sight, the solid state technology reticule adjustments and software algorithms – combined with a complementary color reticle platform – ensure maximum reticle contrast, high-level target accuracy, and boresight retention that cannot be achieved with mechanical boresight adjusters and traditional ballistic drums. This level of accuracy is translated into the tracking electronic zoom (e-zoom) function of the Apollo Pro, when used as a 1x weapon sight, which can be progressively increased from 1x to 2x to 4x and 8x (640x512 format only) without changing the point-of-aim to point of-impact relationship of the targeting reticle.

Based on its superior price-to-performance value, the Apollo Pro Clip-on Thermal Imaging Device represents the most versatile and sophisticated Armasight product available in today's market for hunters, SWAT teams, and military personnel who want to use their own sniper day scopes.

- **Converts your day scope, sight, or binoculars into a thermal imaging device**
- **Mounts in front of any day scope with no re-zeroing required**
- **24/7 Operation in presence of environmental obscurants (smoke, dust, haze, fog)**
- **Superior engineering and design meeting Armasight's 20/50 gold standard**
- **Rugged MIL-STD-810 compliant performance**
- **Operates on 123A or AA batteries**
- **Reliable quick-release locking weapon mount**
- **Objective Germanium Lens Options**
- **TAU-2 17µm Pitch Thermal Sensor**
- **SVGA 800x600 OLED Display**
- **Digital Compass**
- **Digital Inclinometer**
- **Digital Angle Cosine Indicator**
- **Battery Status Indicator**
- **Selectable Palettes: White Hot/ Black Hot/ Sepia/ OEM Custom/ Other Color Variants**
- **Imaging Filter Algorithms**
- **Wireless 5-button Remote**
- **Tracking Digital e-Zoom: 2x/ 4x/ 8x (640x512 only)**
- **Multiple User Selectable Ballistic and Quick Acquisition Reticules**
- **Selectable Reticule Color**
- **Still Picture and Video Recording Capabilities (Mounted DVR Option)**
- **Analog video input and output (NTSC/PAL)**
- **Power input capability**
- **Serviceability under severe conditions**
- **Filled with dry nitrogen to prevent internal fogging**
- **Waterproof**
- **Limited 3-year warranty**
- **10-year warranty on FLIR detector**
- **Made in the USA**

Sale, transfer, transportation, or shipment outside of the U.S. or to any non U.S. Persons is prohibited.
Please contact Armasight for additional information.

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SPECIFICATIONS

Model Name	Apollo Pro MR 336	Apollo PRO MR 640	Apollo PRO LR 640
SYSTEM DATA:			
Refresh Rate		30 or 60Hz	
Magnification (NTSC/PAL)		Unity (1x)	
Objective Lens Type		Germanium	
Type of Focal Plane Array		FLIR Tau 2	
Pixel Array Format	336×256	640x512	
Pixel Size		17 µm	
Resolution	0,34 mRad (70 SOA)	0,34 mRad (70 SOA)	0,17 mRad (35 SOA)
Display Type		AMOLED SVGA 060	
Pixel Display Format		800×600	
Display Brightness		Discretely Adjustable to 8 Levels	
Turn-on Time, max		3 sec	
Digital Zoom	1x, 2x, and 4x	1x, 2x, 4x, and 8x	
Digital Compass		Yes	
Digital Inclinometer		Yes	
Digital Angle Cosine Indicator		Yes	
Battery Status Indicator		Yes	
Image Palettes		White Hot, Black Hot, Sepia, Fusion, Rainbow, and Rain	
Reticle Type		6-Pattern Digitally Controlled: Dot 4 MOA, Line Dot, Cross Center Dot, Cross, Crosshair, and "No Reticle"	
Reticle Color		Black, White, Red, Cyan	
Analog Input and Output Format (resolution)		PAL (768×574 pixels)/ NTSC (640×480 pixels)	
Video Recording		Optional Digital Video Recorder with SD card slot	
Remote Control		Wireless 5-button	
SPECIAL USER-ADJUSTABLE IMAGING TOOLS:			
Active Contrast Enhancement (ACE) - "CONTRAST"		Yes	
Second Generation Digital Detail Enhancement (DDE) – "SHARPNESS"		Yes	
Smart Scene Optimization (SSO) – "SMART SCENE"		Yes	
Information Based Histogram Equalization (IBHEQ) – "SKY/SEA"		Yes	
Automatic Gain Control (AGC)		Yes	
User Controlled Manual Non Uniformity Correction/Flat-Field Correction (UC-MNUC/FFC)		Yes	
Silent Shutterless NUC ™ (SSN)		Yes	
OPTICAL DATA:			
Objective Focal Length	50 mm	50 mm	100 mm
Objective F-number	1:1.4	1:1.4	1:1.4
Field of View (ang.)	6,5° x 5°	12,5° x 10°	6,2° x 5°
Exit Pupil Diameter	40 mm	25 mm	40 mm
Focus Method	Manual	Manual	Manual
Focusing Range	5m to inf.	5m to inf.	10m to inf.
BORESIGHT DATA:			
Windage/Elevation Boresight Increment (NTSC)	0,6 MOA 0,17 mils 0,62in/100yd 1,7cm/100m	1,2 MOA 0,34 mils 1,2in/100yd 3,4cm/100m	0,6 MOA 0,17 mils 0,6in/100yd 1,7cm/100m
Windage/Elevation Boresight Increment (PAL)	0,5 MOA 0,14 mils 0,52in/100yd 1,4cm/100m	1 MOA 0,3 mils 1in/100yd 3cm/100m	0,5 MOA 0,15 mils 0,5in/100yd 1,5cm/100m
Windage Adjustment Range (NTSC/ PAL)	±48MOA / ±40MOA	±96MOA / ±80MOA	±48MOA / ±40MOA
Elevation Adjustment Range (NTSC/ PAL)	±36MOA / ±30MOA	±72MOA / ±60MOA	±36MOA / ±30MOA
ELECTRICAL DATA:			
Battery		Four CR123A 3V Lithium batteries or four AA 1.5V	
Battery Life at 20 °C (68 °F)		Up to 7 hrs (optional up to 14 hrs)	
Extended Battery Pack (optional)		Two 18650 rechargeable batteries (3.7V) or four CR123 type rechargeable batteries with voltage 3.7V max or four standard CR123A 3V Lithium batteries (operational time up to 7 hrs)	
ENVIRONMENTAL DATA:			
Operating Temperature		-51° to +57°C (-59° to +134°F)	
Storage Temperature		-57° to +85°C (-70° to +185°F)	
Recoil Resistance		0.50 BMG weapon shock and recoil	
Environmental Rating		Waterproof, 20 meters immersion for 2 hours	
MIL-STD-810 Compatibility		Yes	
MECHANICAL DATA:			
Weapon Mount Type		Picatinny, MIL-STD-1913, and Weaver Rails	
Height of the Scope Axis above Rail		40 mm (1.57 in)	
Overall Dimensions	217x76x76 mm (8.5x3.0x3.0 in)	197 x 76 x 76 mm (7.5 x 3.0 x 3.0 in)	287 x 90 x 100 mm (11.3 x 3.5 x 3.9 in)
Weight (w/o Batteries)	0.95 kg (2.0 lbs)	0.95 kg (2.0 lbs)	1.3 kg (2.9 lbs)
WARRANTY DATA:			
Warranty		3 Year	
Warranty on FLIR Detector		10 Years	

STANDARD COMPONENTS

BATTERY CARTRIDGE

BATTERY BOX EXTENDER RING

ARMASIGHT KEY

CR123 BATTERY

ADVANCED WIRELESS 5-BUTTON REMOTE

PICATINNY ADAPTER

VIDEO CABLE

OPERATOR MANUAL

CARRYING CASE

LIGHT SUPPRESSOR 1

LIGHT SUPPRESSOR 2

LIGHT SUPPRESSOR 3

LIGHT SUPPRESSOR FOR DAY SCOPE

HARD SHIPPING/ STORAGE CASE #101

OPTIONAL EQUIPMENT

Part No. ANAM000009
SCOPE MOUNTING SYSTEM 1 #40

Part No. ANAM000010
SCOPE MOUNTING SYSTEM 2 #41

Part No. ANAM000011
SCOPE MOUNTING SYSTEM 3 #42

Part No. ANAM000012
SCOPE MOUNTING SYSTEM 4 #43

Part No. ANAM000013
SCOPE MOUNTING SYSTEM 6 #44

Part No. ANAM000045
EXTENDED RAIL ADAPTER #85

Part No. ANAM000021
FSRS FRONT SCOPE RAIL SYSTEM #38

Part No. IAL000AMRF22001
AMRF2200 ADVANCED MODULAR RANGE FINDER

Part No. ATAM000005
HD DVR DIGITAL VIDEO RECORDER

Part No. ATAM000004
RECORDER DT DIGITAL VIDEO RECORDER

Part No. ATAM000008
EXTENDED BATTERY PACK

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