

# ANACONDA

THERMAL IMAGING CLIP-ON SYSTEM

**USER MANUAL** 

#### © 2019 AGM Global Vision. All rights reserved worldwide.

This documentation is subject to change without notice.

No parts of this manual, in whole or in part, may be copied, photocopied, translated, or transmitted by any electronic medium or in machine-readable form without the prior written permission of AGM Global Vision.

If you have questions that are not covered in this manual, or need service, contact AGM Global Vision customer support for additional information prior to returning a product.

#### **AGM Global Vision**

173 West Main Street PO Box 962 Springerville, AZ 85938 Tel. 928.333.4300 Fax 480.393.4882 support@agmglobalvision.com www.agmglobalvision.com

#### **EXPORT INFORMATION**

Buyer acknowledges that all products supplied by AGM Global Vision are subject to U.S. export control laws, including, but not limited to, the Export Administration Regulations, the International Economic Emergency Powers Act, and various U.S. embargoes and sanctions. AGM Global Vision products may not be exported, re-exported, or transferred contrary to U.S. export control laws. In particular, AGM Global Vision products may not be exported, re-exported, or transferred to prohibited countries, individuals, organizations, or entities, including but not limited to those individuals and entities listed on the List of Specially Designated Nationals and Blocked Persons administered or maintained by the U.S. Office of Foreign Assets Control ("OFAC"), the various lists maintained by the Bureau of Industry and Security of the Department of Commerce, and the U.S. State Department and Buyer represents and warrants that neither Buyer nor any of its officers, directors, or employees are on such lists. Distribution or resale by Buyer to such countries, individuals, organizations, or entities is expressly prohibited. Buyer has and will maintain a positive process to ensure compliance with this Section.

## LIST OF CONTENTS

TITLE	PAGE
Safety Summary	4
1. GENERAL INFORMATION	6
1.1 System Description	6
1.2 Standard Components	9
1.3 Optional Equipment	10
1.4 Key Features	11
2. OPERATING INSTRUCTIONS	12
2.1 Installation and Mounting	12
2.2 Controls and Display Indicators	18
2.3 Operating Procedures	26
3. MAINTENANCE INSTRUCTIONS	29
3.1 Operator Troubleshooting	29
3.2 Maintenance	30
4. WARRANTY INFORMATION	32
4.1 Warranty Information and Registration	32
5. SPECIFICATIONS	34
5.1 Specifications	34
APPENDIX	37
A. Spare Parts List	37

## SAFETY SUMMARY

- Read and follow all instructions
- Read all warnings
- · Only use the attachments/accessories specified by the manufacturer
- · All service must be provided by the manufacturer

## 

Always make sure your firearm is unloaded before you place the equipment on the firearm. Verify that the chamber is empty, particularly if you stop the procedure and resume at a later time. Safe handling rules should be followed at all times.

## 

If a scope is mounted too far to the rear of a weapon, the eyepiece can injure the shooter's brow. Shooting at an uphill angle also increases this risk, because it shortens the distance between the brow and the rear of the scope. When mounting your scope, we recommend positioning it as far forward in the mounts as possible.

With hard-recoiling rifles, serious injury or even death can result from eyepiece impact when discharging the firearm.

BEFORE SHOOTING THE FIREARM, verify that your installation provides sufficient space between the eyepiece and the scope to account for the recoil generated by your rifle.

NOTE: Give special attention to this warning when shooting uphill and/or from a prone position. These shooting conditions can dramatically reduce space allotted for recoil between your eyes and the weapon. PLEASE maintain maximum distance when shooting magnum firearms or firearms with heavy recoil. THE USER ASSUMES ALL RESPONSIBILITY AND LIABILITY FOR HAVING THE RIFLESCOPE PROPERLY MOUNTED TO A FIREARM AND USING THE RIFLESCOPE PROPERLY. ALWAYS CHECK THE CONDITION OF YOUR MOUNTING SYSTEM PRIOR TO USING YOUR FIREARM.

### 

This product contains natural rubber latex, which may cause allergic reactions! The FDA has reported an increase in the number of deaths associated with sensitivity to natural latex proteins. If you are allergic to latex, learn which products contain it and strictly avoid exposure to those products.

#### 

Recommends that you use an eyecup on the eyepiece of the day scope, to allow for maximum comfort, space, and to remain undetected.

#### CAUTION:

- To prevent thermal damage to the equipment, never point it (whether ON or OFF) directly at the sun or any other source of high intensity light that the unprotected human eye cannot tolerate (such as a welding arc). To prevent accidental exposure to these types of sources, never leave the equipment around without the objective lens cap secured.
- DO NOT dismantle the equipment.
- Keep the equipment clean. Protect it from moisture, dramatic temperature changes, and electrical shocks.
- DO NOT force the equipment controls past their stopping points.
- DO NOT leave the equipment activated during periods of non-operation.
- · DO NOT store the equipment without first removing the batteries.
- Thoroughly clean and dry all items before placing them into the storage case.
- To avoid deformation or damage, remove the light suppressor from the Anaconda before placing the equipment in storage.
- Scope Mounting Systems are not recommended for installing the Anaconda on firearms with dynamic recoil (0.308 Win or stronger).

#### NOTES:

- The optical axes of the Anaconda and day scope should be aligned. The distance between the
  axes should not exceed 3 mm. If the difference in the axis heights of the Anaconda and day
  scope above the weapon rail exceeds 3 mm, you will need to replace the day scope mounting
  rings or monoblock.
- To avoid losing unsaved data, DO NOT remove the batteries or disconnect the external power source while the Anaconda is on.
- Inadvertent sun damage is not considered a defect in material or workmanship, and is therefore
  not covered in the product warranty.

## **1 GENERAL INFORMATION**

## 1.1 SYSTEM DESCRIPTION

The Anaconda consists of two primary parts: a thermal imaging device and a mount. The equipment comes with the mount secured to the body of the device (as shown in Figure 1-1).

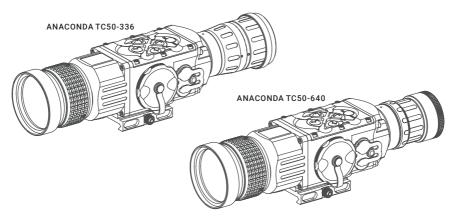


FIGURE 1-1. ANACONDA THERMAL IMAGING CLIP-ON SYSTEM

The Anaconda is a thermal sensitive device. It can sense differences in heat emitted by objects in its field of view, and converts the received temperature pattern into a viewable image that represents the scene in black and white or a color pattern, depending on the selected image palette.

#### NOTE:

It is important that the Anaconda sensor receive sufficient thermal contrast between the target and background area, or between the different parts of a target. For example, there would be a vast temperature contrast between the snow and any heat target (such as an animal), making it exceptionally easy to distinguish the target.

The main optical-electronic components of the Anaconda include: an objective thermal lens, an output lens, a thermal-imaging camera, a display, a control card, and a button control panel. The Anaconda is equipped with manual objective lens focusing.

To accommodate individual user needs, the Anaconda has a variety of digitally controlled options, such as:

- Display brightness
- Palette color selection
- User-Controlled, Manual Non-Uniformity Correction/ Flat-Field Correction (UCMNUC/ FFC)
- Imaging enhancements
- Custom settings

Anaconda series clip-ons are based on FLIR Tau 2 cameras that offer improved overall image quality in a wide range of dynamic thermal environments. The Anaconda includes special, user-adjustable imaging tools that include:

- Active Contrast Enhancement (ACE) a digital "Contrast" correction that allows for smart scene optimization based on dynamic adjustments, where a variety of contrast levels occur depending on relative scene temperature.
- Second Generation Digital Detail Enhancement (DDE) a "Sharpness" correction that digitally enhances the picture, significantly sharpens edges, and further reduces image noise.
- Smart Scene Optimization (SSO) a fine-tuning computational correction that significantly improves overall visual acuity for targets that have thermal signatures similar to the surrounding background.
- Automatic Gain Control (AGC) a "Gain" correction that used to automatically adjust the gain to an appropriate range, the weaker the image signal, the stronger the gain.
- User-Controlled Manual Non-Uniformity Correction/ Flat-Field Correction (UCMNUC/ FFC). There is a mechanical shutter between the camera sensor and the lens. This shutter is used to perform a non-uniformity correction (NUC), also known as flat-field correction (FFC). During FFC, the shutter presents a uniform temperature source to each detector element in the array. While imaging the flat-field source, the camera updates the offset correction coefficients, resulting in a more uniform image after the process is complete. All Anaconda models allow for user to manually trigger or interrupt scheduled UCMNUC/ FFC function.
- Silent Shutterless NUC<sup>™</sup> (SSN) In addition to User-Controlled Manual NUC/ FFC, all Anaconda models employ a digital, supplemental, non-mechanical flat-field correction that extends periods between mechanical shutter events and further reduces image noise. SSN is an always ON enhancement.

Information on the current operating state (battery status, active function, etc.) is continuously shown, making field operation of the Anaconda simple and convenient.

Manufactured for exceptional durability, the Anaconda has a lightweight and robust aluminum body. A side Picatinny/Weaver rail allows the user to install an optional HD Video Recorder, WiFi Attachment, Extended Battery Pack, or other equipment.

A standard NTSC/PAL video input/output connector enables an external video display (monitor, TV) or video recorder to be connected to the Anaconda.

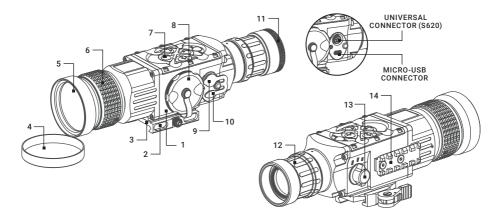
The Anaconda is powered by two CR123A ( $2\times 3V$ ) batteries. An external 6VDC/600mA power source and USB power bank can also be connected to the Anaconda.

The quick-release mount of the Anaconda fits any Picatinny, MIL-STD-1913, or Weaver weapon rail. The mount's lever-cam clamping device ensures easy, quick, and reliable mounting and removal.

The Anaconda is shown in Figure 1-2. The ITEM NO. column of Table 1-1 indicates the number used to identify items in Figure 1-2.

#### NOTE:

Here and below, the model Anaconda TC50-640 is used for the example.



#### FIGURE 1-2. SYSTEM DESCRIPTION

#### TABLE 1-1. SYSTEM DESCRIPTION

ITEM	DESCRIPTION	
1	Body	
2	Mount	
3	Riser	
4	Objective Lens Cap	
5	Objective Lens	
6	Focus Ring	
7	Button Control Panel	

ITEM	DESCRIPTION
8	Battery Cap
9	Universal Connector with a Cap
10	Micro-USB Connector with a Cap
11	Output Lens Cap
12	Output Lens
13	Operation Switch
14	Side Picatinny/Weaver Rail

## **1.2 STANDARD COMPONENTS**

The Anaconda standard components are shown in Figure 1-3 and listed in Table 1-2. The ITEM NO. column indicates the number used to identify items in Figure 1-3.

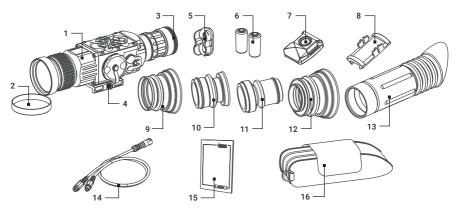


FIGURE 1-3. STANDARD COMPONENTS

#### TABLE 1-2. STANDARD COMPONENTS

ITEM NO.	DESCRIPTION	QUANTITY
1	Anaconda Thermal Imaging Clip-On system	1
2	Objective Lens Cap	1
3	Output Lens Cap	1
4	Mount	1
5	Battery Cassette	2
6	CR123A Lithium Battery	2
7	Wireless Remote Control	1
8	Picatinny Adapter for Wireless Remote Control	1
9	Light Suppressor (for Anaconda TC50-336)	1
10	Light Suppressor 1 (for Anaconda TC50-640)	1
11	Light Suppressor 2 (for Anaconda TC50-640)	1
12	Light Suppressor 3 (for Anaconda TC50-640)	1
13	Light Suppressor for Day Scope	1
14	Video Cable	1
15	Operation and Maintenance Manual	1
16	Hard Shipping/ Storage Case	1

## 1.3 OPTIONAL EQUIPMENT

Optional items are shown in Figure 1-4 and listed in Table 1-3.



#### FIGURE 1-4. OPTIONAL EQUIPMENT

The ITEM NO. column indicates the number used to identify items in Figure 1-4. The PART NO. column indicates the primary number used by the manufacturer, to identify an item.

#### TABLE 1-3. OPTIONAL EQUIPMENT

ITEM NO.	DESCRIPTION	PART NO.
1	Scope Mounting System 1 (for Anaconda TC50-640 only) A mounting system used to install the Anaconda on the lenses of specified day scopes. Includes a clamp with inserts that will fit 25.4 and 30 mm diameters.	6106SM11
-	Scope Mounting System 2 (for Anaconda TC50-640 only) A mounting system used to install the Anaconda on the lenses of specified day scopes. Includes a clamp with inserts that will fit 38 and 42 mm diameters.	6106SM21
-	Scope Mounting System 3 (for Anaconda TC50-640 only) A mounting system used to install the Anaconda on the lenses of specified day scopes. Includes a clamp with inserts for 46.7, 48, 48.7-49, 49.5, and 5 0mm fitting diameters.	6106SM31
-	Scope Mounting System 4 (for Anaconda TC50-640 only) A mounting system used to install the Anaconda on the lenses of specified day scopes. Includes a clamp with inserts for 56, 57, and 58. 7mm fitting diameters.	6106SM41
-	Scope Mounting System 5 (for Anaconda TC50-640 only) A mounting system used to install the Anaconda on the lenses of specified day scopes. Includes a clamp with inserts for 62 mm fitting diameter.	6106SM51
2	AGM WiFi Attachment	6305WIF1
3	AGM HD Recorder	6305HDR1
4	AGM Extended Battery Pack	6308EXB1
5	Hard Case for Storage/Transportation	6610HCS1

## 1.4 KEY FEATURES

- · Converts your day scope, sight, or binoculars into thermal imaging device
- · Mounts in front of any day scope with no re-zeroing required
- · High-performance thermal imaging camera
- · Lightweight and robust design
- · Easy to operate
- · Manually adjustable objective lens
- Real-time display
- Digitally controlled features:
  - Palette
  - Enhancement
  - Settings
  - Display Brightness
  - User-Controlled Manual Non-Uniformity Correction/ Flat-Field Correction (UCMNUC/ FFC)
- · Current operational state information display (battery status, active profile, palette setting)
- Wireless remote control
- Analog video input and output (NTSC/PAL)
- · Powered by two standard CR123A batteries.
- Power input capability
- Digital HD video recorder (optional)
- External Wi-Fi module (optional)
- · Fits any Picatinny, MIL-STD-1913, or Weaver rail with an adjustable quick-release mount
- · Serviceability under severe conditions
- · Filled with dry nitrogen to prevent internal fogging
- Waterproof
- Limited 3-year warranty

## **2** OPERATING INSTRUCTIONS

## 2.1 INSTALLATION AND MOUNTING

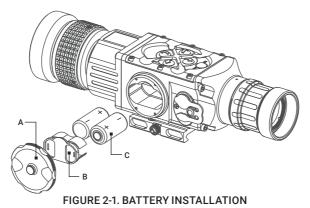
#### 2.1.1 BATTERY INSTALLATION

#### CAUTION:

#### Verify that the equipment is off before installing a battery.

Install two CR123A batteries as follows (refer to Figure 2-1):

- 1. Unscrew the battery cap (A).
- 2. Remove the battery cassette (B).
- 3. Insert the batteries (C) into the cassette. Align the polarity symbols on the batteries with the polarity symbols on the cassette.
- 4. Reinsert the cassette with installed batteries.
- 5. Replace the battery cap.



#### 2.1.2 INSTALLING THE ANACONDA ON A PICATINNY/WEAVER RAIL

### 

Always make sure your firearm is unloaded before you place the equipment on the firearm. Always verify that the chamber is empty, especially if you stop the procedure and resume later. Safe handling rules should be followed at all times.



AGM recommends that you use an eyecup on the day scope's eyepiece for maximum safety and comfort, as well as to escape detection.

#### NOTE:

The optical axes of the Anaconda and day scope should be aligned. The distance between the axes should not exceed 3 mm. If the difference in the axis heights of the Anaconda and day scope above the weapon rail exceeds 3 mm, you will need to replace the day scope mounting rings or monoblock.

The Anaconda comes fully assembled with a Picatinny/Weaver mount (Figure 2-2).

The mount is (A) coupled with a riser (B) and attached to the Anaconda seating rail (C) with two  $M4\times 20$  flathead socket cap screws (D).

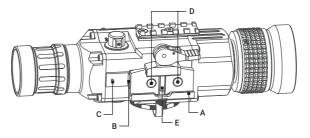


FIGURE 2-2. THE ANACONDA FULLY ASSEMBLED WITH THE MOUNT

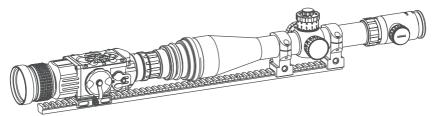




Figure 2-3 shows the Anaconda mounted in front of a day scope.

To install the Anaconda on a Picatinny/Weaver rail, do the following:

- 1. Unscrew the output lens cap and place it in the storage case.
- 2. Remove the light suppressor from the storage case. Screw it into the thread of the output lens in place of the cap.
- 3. Unlock the clamping device (A) of the Anaconda mount by pushing down on the lever holder (B, see Figure 2-4) and unlocking the cam lever (C).
- 4. Install the Anaconda on the Picatinny/Weaver rail in front of the day scope so that the stop (E, see Figure 2-2) slides into one of the rail's transverse slot. The light suppressor should cover the day scope's objective lens.

5. Affix the Anaconda to the rail by locking the cam lever (C, see Figure 2-4).

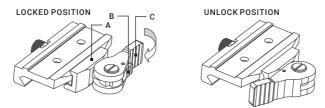


FIGURE 2-4. MOUNT. TOP VIEW

6. Verify that the clamping device is firmly secured to the Anaconda. If necessary, adjust the clamping device as detailed in Part 2.1.3 (Clamping Device Adjustment).

#### 2.1.3 CLAMPING DEVICE ADJUSTMENT

To adjust the mount's clamping device, do the following (refer to Figure 2-5):

- 1. Unlock the clamping device and remove the Anaconda from the weapon.
- 2. To tighten/loosen the clamping device (B), push the cam (C) towards the arrow, which will cause the nut (A) to slide out of its hole. Turn the nut (A) CW/CCW respectively, in one-two increments (see note below). Backward-moving springs will cause the nut (A) to slide back into the hole.

#### NOTE:

The eight-sided nut of the clamping device will only fit into the hole if turned in one of the discrete positions using increments equal to 360°/8.

3. Verify that the adjusted clamping device is firmly secured to the Anaconda.

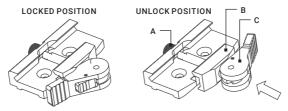


FIGURE 2-5. MOUNT. UNDERSIDE VIEW

#### 2.1.4 INSTALLING THE ANACONDA TC50-640 ON THE LENS OF A DAY SCOPE

Use the optional Scope Mounting System (SMS) to install the Anaconda TC-50-640 onto day scope lenses.

#### NOTE:

The adapters differ in attaching diameters and must fit with the day scope parameters specified in Table 5-7 (Scope Mounting Systems Data).

#### NOTE:

The Anaconda cannot be attached to scopes that include focus rings on the housing of the objective lens.

#### CAUTION:

Scope Mounting Systems are not recommended for installing the Anaconda on firearms with dynamic recoil (0.308 Win or stronger).

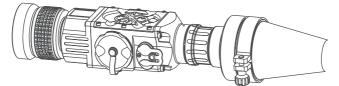


FIGURE 2-6. THE ANACONDA INSTALLED ON THE LENS OF A DAY SCOPE

Figure 2-6 shows the Anaconda TC50-640 installed on the lens of a day scope.

Install the Anaconda on the lens of a day scope as follows (refer to Figure 2-7):

- 1. Using a 2.5 mm Allen key, unscrew the M4×8 screws securing the Anaconda mount. Remove the mount from the seating rail and place it, along with the screws, into the storage case.
- 2. Take off the output lens cap and put it into the storage case.
- 3. With the nut (B) loosened, place the insert (C) into the SMS's clamp (A).
- 4. Screw the SMS into the Anaconda's output lens thread.
- 5. With the nut (B) loosened, slide the Anaconda with the SMS onto the lens of the day scope as far as it goes.
- 6. Tighten the nut (B) using a screwdriver.

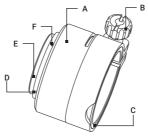


FIGURE 2-7. SCOPE MOUNTING SYSTEM

If the position of the SMS's clamping nut is uncomfortable, change it as follows:

- 1. Decide on desirable position of the nut and estimate the angle through which the SMS should be turned CW (see Figure 2-8).
- 2. Remove the SMS from the Anaconda.
- 3. Using a screwdriver, remove the M2×2.5 screws (F, see Figure 2-7) and then unscrew the ring (E).

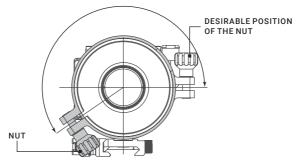


FIGURE 2-8. ESTIMATION OF THE SMS TURNING ANGLE

#### CAUTION:

To loosen the ring (E, Figure 2-7), use the two auxiliary non-threaded holes (D). DO NOT USE the threaded ones.

- 4. Using a lathe or other precision cutting tool, cut the inside face of the ring (E, Figure 2-7). The value of cuts (in millimeters) should be equal to the value of the turning angle (in angular degrees) divided by 360°.
- 5. Screw the ring (E) into the SMS's body with its cut end directed inwards. Tighten the screw.
- 6. After applying a small amount of thread lock to the threads, affix the ring (E) using the two M2×2.5 screws (F).

#### 2.1.5 INSTALLING THE LIGHT SUPPRESSOR FOR A DAY SCOPE

The Light Suppressor for a Day Scope (A, Figure 2-9) slides over the eyepiece of your daytime scope (B). The suppressor can be used with scopes that have 40-43 mm eyepiece diameters and 100-120 mm eye relief.

The suppressor can be adjusted for the eye relief of your scope by cutting the rubber at the desired distance (C).

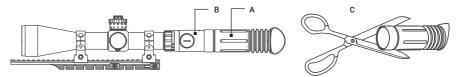


FIGURE 2-9. LIGHT SUPPRESSOR FOR A DAY SCOPE

#### 2.1.6 FASTENING THE WIRELESS REMOTE CONTROL TO A WEAPON

Using Velcro<sup>®</sup> tape (A, Figure 2-10), fasten the remote control (B) to your weapon in an easily accessible place (e.g., on the front of the rifle stock).

If your rifle has a Picatinny or Weaver rail on the front end, you can use the Picatinny adaptor for the wireless remote (C). Install the adaptor onto the rail (D). Insert the remote control unit into the adapter.



FIGURE 2-10. WIRELESS REMOTE CONTROL

#### 2.1.7 INSTALLING ADDITIONAL EQUIPMENT

Use the side Picatinny/Weaver rail to install any additional equipment, such as the AGM HD Video Recorder, WiFi Attachment, or the Extended Battery Pack.

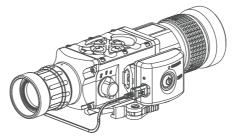


FIGURE 2-11. HD RECORDER INSTALLATION

#### 2.1.8 CONNECTING AN ADDITIONAL EQUIPMENT

#### CAUTION:

Turn off the Anaconda before removing the batteries or connecting/disconnecting any external equipment.

Remove the connector protective cap (see Figure 1-2).

Connect a cable of the external 5V battery bank to the Anaconda Micro-USB connector.

Connect a cable of Digital Video Recorder, WiFi Attachment, or the Extended Battery Pack to the Anaconda S620 universal connector.

Use the video cable plug (A, Figure 2-12) to connect an external video recorder/monitor/TV to the Anaconda. Connect the video cable plug (C) to the Anaconda S620 universal connector.

Use the video cable plug (B) to connect an external power source (6 VDC / 600 mA) to the Anaconda. Connect the video cable plug (C) to the Anaconda S620 universal connector.

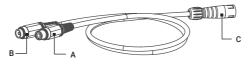


FIGURE 2-12. VIDEO CABLE

#### NOTE:

The external power supply must have a standard OD double-pole socket with a positive central contact.

#### CAUTION:

After removing the cable, replace the protective cap over the connector.

## 2.2 CONTROLS AND DISPLAY INDICATIONS

#### 2.2.1 CONTROLS

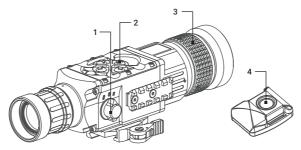
#### CAUTION:

DO NOT force the equipment controls past their stopping points.

The Anaconda controls are shown in Figures 2-13 and 2-14, and are defined in Tables 2-1 and 2-2. The ITEM NO. columns indicate the numbers used to identify items in the figures.

#### NOTE:

Various display symbols indicating the current operating state of the Anaconda can be displayed permanently, may appear momentarily, or can be set to appear only when a certain function is activated.



**FIGURE 2-13. CONTROLS** 

ITEM	CONTROL/INDICATOR	FUNCTION
		Activates the Anaconda when turned to ON.
1	Operation Switch	Activates Standby mode when turned to STB.
		Deactivates the Anaconda when turned to OFF.
2	Control Panel Buttons	Configures operational settings. See Table 2-2 for button functions.
3	Objective Focus Ring	Focuses the objective lens. Adjusts for sharpest view of the scene.
4	Remote Control Button	Activates/deactivates the Anaconda in standby mode. To turn the unit on, press button once, to turn it off – press button again. To operate the device in short-time activation mode, press and hold the remote control button down for 1.5+ seconds. Release the remote control button to deactivate the device.
Battery Status Indicator (a battery		The color fill (green/yellow/red) bar in the battery icon indicates the current power level of the internal battery, or remaining battery life.
-	icon in the top right hand part of the display)	The totally shaded battery icon indicates the fully charged battery.
	,	The flashing transparent battery icon indicates a low battery.

#### TABLE 2-1. CONTROLS AND INDICATORS

The Anaconda button control panel is shown in Figures 2-14.

Table 2-2 contains the button functions and their brief descriptions. The ITEM NO. column of the table indicates the number used to identify buttons in Figure 2-14.

#### NOTE:

Each button is responsible for some functions selected by briefly pushing or holding down the button, or using the button in combination with a second one (as described in Table 2-2). Pushing a button for 1.5+ second is considered "holding down."

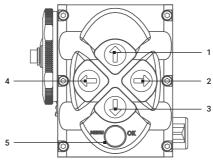


FIGURE 2-14. BUTTON CONTROL PANEL

#### ITEM EUNCTION DESCRIPTION Push the button (1) to increase the screen brightness or **Display Brightness** Control push the button (3) to decrease the screen brightness. To scroll up through the available palettes push and hold button (1) or (3) to scroll down or up respectively. There Image Palette are 13 palettes available: White Hot, Black Hot, Fusion, Control Rainbow, Globow, Ironbow 1, Ironbow 2, Sepia, Color 1, Color 2, Ice-Fire, Rain and OEM. 1.3 User-Controlled Simultaneously holding down buttons (1) and (3) induces manual User-Controlled Manual Non-Uniformity Manual Non-Uniformity Correction/Flat-Field Correction (UCMNUC/ FFC). Correction/ Flat-Field Correction (UCMNUC/ FFC) Use the UP (1) and DOWN (3) buttons to navigate through Up. Down the items on the menu. **Digital Zoom Control** To change the zoom progressively, push button (2). 2 Reticle on/ off Pushing and holding button (2) to reticle ON/OFF. To change the reticle color, push button (4). There are four Reticle Color Control colors available of the reticle: black, white, red and cvan. 4 To scroll through the reticle types, push and hold button Reticle Pattern (4). There are five types of reticles available: "Dot 4 MOA", Control "Line Dot", "Cross Center Dot", "Cross", "Crosshair". Simultaneously holding down buttons (2) and (4) zeroes **Reticle Position** Zeroina the reticle position to the center of the screen. 2,4 Use the LEFT (4) and RIGHT (2) buttons to navigate Left, Right through the items on the menu. Push the OK button (5) to view the settings available for OK the item selected. Pushing and holding button (5) will bring up the Main Menu selection. The menu includes the following 5 MFNU functions: Palette, Reticle, Boresight, Enhancement, and Settinas. Pushing button (5) when the countdown is on the screen UCMNUC/ FFC Process will cancel the UCMNUC/ FFC and the shutter will not Interruption

interrupt viewing.

#### TABLE 2-2. BUTTON CONTROLS

#### 2.2.2 MAIN MENU

Most setup options can be accessed from the MAIN MENU.

To display the MAIN MENU, push and hold down the MENU button (5) on the control panel (Figure 2-15).

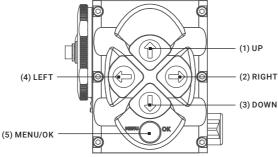


FIGURE 2-15. MAIN MENU NAVIGATION BUTTONS

Once the MAIN MENU is displayed (Figure 2-16), use the UP and DOWN buttons (Figure 2-15) to navigate through the items on the menu.

Push the OK button to view the settings available for the item selected.

MAIN MENU		
> EXIT PALETTE RETICLE BORESIGHT ENHANCEMENT SETTINGS		

FIGURE 2-16. MAIN MENU

#### NOTES:

Navigate through sub-menu items by pushing UP and DOWN, except where otherwise indicated. The LEFT and RIGHT buttons are available only when specified on the menu screen with <> symbols.

After a menu item is selected, push the OK button to make the selected setting/ activate the selected function.

Select the EXIT item and then push the OK button to return to the MAIN MENU.

#### Palette Menu

The PALETTE menu (Figures 2-17 and 2-18) allows the user to select from a choice of temperature imaging modes: White Hot, Black Hot, Fusion, Rainbow, Globow, Ironbow 1, Ironbow 2, Sepia, Color 1, Color 2, Ice-Fire, Rain, and OEM Custom.

#### NOTE:

To navigate through the items on the two-page PALETTE menu, hold down the UP (1) / DOWN (3) button.

The palettes act as color templates for visualizing temperature changes in the scene.

#### NOTE:

The most popular palettes are White Hot and Black Hot, usually known as inversion. White Hot mode is good for spotting targets, while Black Hot mode is most useful for situational reading.

#### NOTE:

Training and experience are required to quickly and properly interpret the thermal image being displayed.

PALETTE	
> EXIT WHITE HOT BLACK HOT FUSION RAINBOW GLOBOW IRONBOW1 IRONBOW2	

FIGURE 2-17. PALETTE MENU. PAGE 1

PALETTE		
> EXIT SEPI/ COLO COLO ICE - RAIN OEM	R 1 R 2	

FIGURE 2-18. PALETTE MENU. PAGE 2

#### **Reticle Menu**

The RETICLE menu (Figure 2-19) allows the user to select from a choice of reticle patterns: Dot Type, Line Dot, Crosshair Center Dot, and Crosshair.

To navigate through the items on the RETICLE menu, push and hold down the LEFT button (4).

RETICLE		
> EXIT		
+		
<> CROSS		

FIGURE 2-19. RETICLE MENU

#### **Boresight Menu**

The BORESIGHT function allows the user to change the position of the reticle in the display.

#### NOTE:

Remember that the center of impact on the target shifts in the opposite direction from the direction that the reticle shifts. So, to bring the center of impact to the right/left and up/down, you must shift the reticle to the left/right and down/up, respectively.

Figure 2-20 shows the boresight screen.

BORESIGHT		
> EXIT		
+		
WINDAGE <> 10		
ELEVATION <> -5		
ELEVATION <>-5		

FIGURE 2-20. BORESIGHT MENU

To control reticle shifting, check the running reticle center coordinates, which are printed in the lower left hand corner of the display.

#### NOTE:

For display coordinates, the origin is the center of the display. The running coordinate of the reticle is the number of incremental shifts of the reticle from the center of the display. The negative (-) sign appears before the displayed number when the reticle shifts left or down. The point of impact (POI) on the target shifts right or up, respectively).

Push the LEFT and RIGHT buttons to adjust for windage. Moving the reticle in the positive (+) direction (to the right) will move the POI to the left. Moving the reticle in the negative (-) direction (to the left) will move the POI to the right.

Push the UP and DOWN buttons to adjust for elevation. Moving the reticle in the positive (+) direction (up) will move the POI down. Moving the reticle in the negative (-) direction (down) will move the POI up.

Every time one of these buttons is pushed, the reticle shifts a single pixel increment corresponding to the minimum boresight correction value, and the **point of impact** on the target moves according to the specified windage/elevation boresight increment, in the opposite direction to that of the shifting reticle.

Every time one of these buttons is pushed for 3 sec, the reticle will shift in increments of 4 pixels until you release the button.

Hold down both the LEFT and RIGHT buttons to reset to zero azimuth and elevation. The reticle will shift to the display center.

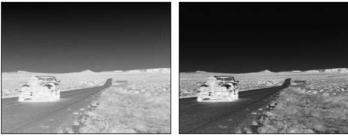
#### **Enhancement Menu**

The ENHANCEMENT menu (Figure 2-21) allows the user to take advantage of advanced signal processing algorithms, in order to improve the quality of the picture that is being viewed under a variety of different thermal environments.

ENHANCEMENT	
> EXIT	
CONTRAST	<> 4
SHARPNESS	<> 60
SMARTSCENE	<> 15
GAIN	<> 35
AGC SPEED	<> 12

#### FIGURE 2-21. ENHANCEMENT MENU

CONTRAST - Active Contrast Enhancement (ACE) – a digital contrast correction that allows for a smart scene optimization based on dynamic adjustments where a variety of contrast levels occur depending on relative scene temperatures. The adjustment range is from -8 to +8 with a default value of 4. Lower values will cause hotter objects to get more contrast, while higher values will cause colder objects get more contrast.



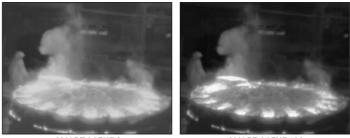
CONTRAST -8 CONTRAST +8 FIGURE 2-22. DIGITAL CONTRAST CORRECTION

SHARPNESS - Second Generation Digital Detail Enhancement (DDE) – a sharpness correction that digitally enhances the picture for clearer imagery, significantly sharper edges, and reduced image blurriness. The adjustment range is from -20 to +100 with a default value of 60. Lower volumes will soften the edges of the image. Higher values will sharpen objects, enhance details, and further increase the signal to noise ratio.



SHARPNESS -20 SHARPNESS +100 FIGURE 2-23. SHARPNESS CORRECTION

SMART SCENE - Smart Scene Optimization (SSO) – a fine-tuning computational correction that significantly improves overall visual acuity for targets that have thermal signatures similar to the surrounding background. Higher values provide more linear automatic gain control behavior. Objects with similar (but not identical) temperatures can be differentiated with greater accuracy. The adjustment range is from 0 to 100, with a default value of 15.



SMART SCENE 0 SMART SCENE 100 FIGURE 2-24. SMART SCENE OPTIMIZATION

GAIN - Automatic Gain Control (AGC) – a correction that used to automatically adjust the gain to an appropriate range, the weaker the image signal, the stronger the gain. The adjustment range is from 0 to 255 with default value 35.



GAIN 0

GAIN 35

FIGURE 2-25. GAIN CORRECTION

AGC SPEED – parameter that allows user to control the refresh rate of Automatic Gain Control (AGC). The adjustment range is from 0 to 128 with a default value of 12.

#### Settings Menu

The SETTINGS menu (Figure 2-26) allows direct changes to the saved rifle profiles, video standards, left display margins, top display margins, and factory default settings.

The <u>RIFLE PROFILE</u> function allows the user to boresight the Anaconda to the weapon, and then save the bore sighted reticle position map in the "Rifle Profile" tab. This can be done for the same scope with up to 3 different rifles (Profile 1, Profile 2, and Profile 3).

The <u>STANDARD</u> function allows the user to select either the NTSC or PAL video standard.

The <u>LEFT MARGIN</u> function allows the user to move the display left/right by a fixed number of pixels.

The <u>TOP MARGIN</u> function allows to move the display up/down by a fixed number of pixels.

The <u>FACTORY DEFAULTS</u> function resets the Anaconda to factory defaults.

The SETTINGS menu also includes factory software revision information under FW: (software version is shown in alpha-numeric format).

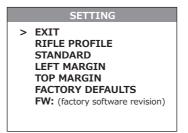


FIGURE 2-26. SETTINGS MENU

#### NOTE:

After configuration is complete, select EXIT on the MAIN MENU and push the OK button to leave the MAIN MENU. All settings will be saved.

## 2.3 OPERATING PROCEDURES

#### 2.3.1 OPERATING

### 

Always make sure your firearm is unloaded before you place the equipment on the firearm. Always verify that the chamber is empty, especially if you stop the procedure and resume later. Safe handling rules should be followed at all times.

#### CAUTION:

DO NOT force the equipment controls past their stopping points.

#### CAUTION:

To prevent thermal damage to the equipment, never point it (either ON or OFF) directly at the sun or any other source of high intensity light that the unprotected human eye cannot tolerate (such as a welding arc). To prevent accidental exposure to these sources, never leave the equipment around without first securing the objective lens cap.

Operating procedures are as follows:

- 1. Remove the Anaconda from the carrying case.
- 2. Install the Anaconda on the weapon with a day scope. Refer to Parts 2.1.2-2.1.4 for installation procedures.
- 3. Verify that the Anaconda is securely mounted to the weapon or scope.

- 4. Remove the protective caps.
- 5. Point the equipment at an object.
- 6. Activate the Anaconda by turning the operating switch ON. After approximately 3 sec, video of the thermal scene should appear.
- 7. If the day scope includes a focusing ring (i.e., parallax adjustment knob), adjust the focus for a parallax-free image.
- 8. Turn on the day scope's reticle illumination and adjust the reticle brightness.
- 9. Adjust the focus of Anaconda by turning the focus ring (CW for far focus, CCW for near focus).

#### NOTE:

#### The total focus range is covered with 3/4 turns of the objective focus ring.

10. Using the buttons on the control panel (Figure 2-27), configure the Anaconda for your specific situation.

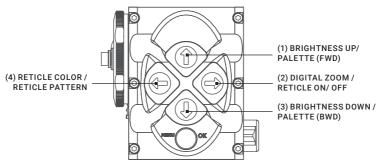


FIGURE 2-27. SETTING BUTTONS

For more information on operational setting procedures, see Part 2.2 (Controls and Display Indications).

A. Adjust the brightness of the display to your preferred level.

Push the brightness adjustment buttons to increase (1)/decrease (3) the display brightness by one level at a time until you reach your desired brightness level.

B. Use UCMNUC/ FFC (User-Controlled Manual Non-Uniformity Correction/ Flat-Field Correction) function to improve image quality. As the camera and the detector heat up during use, the detector pixels will drift. The pixels do not drift uniformly. The camera software compensates for the drift up to an accurate position point, but when the limit is reached the UCMNUC/ FFC function is triggered. A uniform mechanical shutter is placed between the lens and the detector for a moment and the signal is processed.

Push and hold the two brightness control buttons (1 and 3) at the same time to manually trigger the User-Controlled Manual Non-Uniformity Correction/ Flat-Field Correction.

If necessary, interrupt the automatic UCMNUC/ FFC process by pushing the OK button (5) on the control panel during the 5-second countdown, which will appear at the bottom of the display.

C. Adjust as necessary using the MAIN MENU. See Part 2.2.2 (Using the MAIN MENU).

#### NOTE:

After configuration is complete, select EXIT on the MAIN MENU and push the OK button to leave the MAIN MENU. All settings will be saved.

- 11. To align the barrel of the weapon, place the reticle on the desired target. To allow for the bullet's travel (i.e. bullet drop, windage, and the target mobility), adjust the boresight of the day scope.
- 12. To operate the Anaconda with wireless remote control, turn the function switch to the STB position (Standby). After it the Remote Control button can activate/ deactivate the device in two ways:

1) To turn the device on, press the remote control button once, to turn it off – press the button again.

2) To operate the device in short-time activation mode (see note below), press and hold the remote control button down for 1.5+ seconds. Release the remote control button to deactivate the device.

#### CAUTION:

DO NOT leave the equipment activated when not in use.

#### 2.3.2 ANACONDA SHUT-DOWN

#### NOTE:

Shut down the Anaconda to properly to avoid losing unsaved settings and data.

Shutdown the Anaconda as follows:

- 1. Be sure to save your settings and data.
- 2. Turn off the Anaconda.
- 3. Replace the cap on the objective lens.
- 4. Disconnect the cable (if applicable).
- 5. Place the cap on the connector.
- 6. Dismount the Anaconda from the weapon.
- 7. Remove the batteries.

#### CAUTION:

Do not store the Anaconda with the batteries still installed.

8. Store the Anaconda and all accessories in the carrying case.

## **3 MAINTENANCE INSTRUCTIONS**

## 3.1 OPERATOR TROUBLESHOOTING

The purpose of troubleshooting is to identify the most frequent equipment malfunctions, probable causes, and corrective actions required.

Table 3-1 lists the common malfunctions that may be found during the operation or maintenance of the Anaconda. Perform the tests/inspections and corrective actions in the order listed.

This table does not list all of the malfunctions that may occur with your device, or all of the tests and corrective actions that may be necessary. If you experience an equipment malfunction that is not listed, or is not fixed by the corrective actions listed in the table, please contact Customer Service center.

MALFUNCTION	PROBABLE CAUSE/ TEST/ INSPECTION	CORRECTIVE ACTION	
The Anaconda fails to activate.	Batteries are missing or improperly installed.	Insert batteries or install correctly.	
	Batteries are dead.	Replace the batteries.	
	Batteries, surfaces, or contacts are dirty or corroded.	Clean the contact surfaces with a pencil eraser and/or alcohol and cotton swabs.	
	Remote control unit is damaged.	Please contact Customer Support.	
	Remote control battery is dead.	Replace the battery as per Part 3.2.4.	
	The equipment is damaged.	Please contact Customer Support.	
The Anaconda is not responsive to control buttons.	The equipment is damaged.	Please contact Customer Support.	
Remote control does not work.	Battery is missing or improperly installed.	Insert battery or install correctly.	
	Battery is dead.	Replace the battery.	
	Battery surfaces or contacts are dirty or corroded.	Clean the contact surfaces with a pencil eraser and/or alcohol and cotton swabs.	
	Remote control unit is damaged.	Please contact Customer Support.	

#### TABLE 3-1. OPERATOR TROUBLESHOOTING

MALFUNCTION	PROBABLE CAUSE/ TEST/ INSPECTION CORRECTIVE ACTION		
Poor image	Check objective lens focus.	Refocus.	
quality.	Check for fogging or dirt on objective lens and output lens.	Clean the lenses as detailed in Part 3.2.2.	
	The equipment is damaged.	Please contact Customer Support.	
No image on an external monitor.	Video cable is damaged.	Replace the video cable with a new one. Please contact Customer Support.	
	The equipment is damaged.	Please contact Customer Support.	
Hindered	Dirty cap thread.	Clean the thread.	
rotation of the battery cap.	Damaged cap thread.	Replace the cap with a new one. Please contact Customer Support.	
Light is visible around light suppressor.	Check suppressor resilience.	If the suppressor is defective, please contact Customer Support.	

### 3.2 MAINTENANCE

#### 3.2.1 GENERAL

The Anaconda operator maintenance consists of operational tests, inspections for unit serviceability, cleaning and mounting procedures, corrective actions (troubleshooting and replacement of a limited number of parts). Maintenance instructions covered elsewhere in this manual (PMCS, troubleshooting, etc.) are not repeated in this section.

#### CAUTION:

The Anaconda is a precision electro-optical instrument and must be handled carefully at all times to prevent damage.

#### CAUTION:

DO NOT dismantle the equipment.

#### 3.2.2 CLEANING PROCEDURES

Clean the Anaconda and optional items as follows:

- 1. Gently brush off any dirt from the equipment using only a clean, soft cloth.
- 2. Moisten the cloth with fresh water and gently wipe the external surfaces (except for optical surfaces).
- 3. Dry any wet surfaces (except for optical surfaces) with another clean, dry soft cloth.
- 4. Using a lens brush, carefully remove all loose dirt from optical surfaces (objective lens and output lens).

- 5. Slightly dampen a cotton swab with alcohol and gently wipe optical surface. Clean the optical surface using circular movements, starting from the center and moving out towards the edge. Do not touch the lens holder. Change the cotton swab after each circular stroke. Repeat until the optical surface is clean.
- 6. Clean the battery contact surfaces and contact springs with a pencil eraser and/or alcohol and cotton swabs.

#### CAUTION:

Thoroughly dry all items before placing them into the storage/carrying case.

#### 3.2.3 BORE SIGHTING

Perform the Anaconda bore sighting:

- When the Anaconda is mounted to a new weapon for the first time;
- After repair of the Anaconda/ weapon;
- As the need arises (in case of systematic inaccuracy or missing the target).

#### 3.2.4 BATTERY REMOVAL AND REPLACEMENT

Refer to Part 3.1.1 for battery installation procedures.

Replace the remote control battery as follows:

1. Using a screwdriver, unscrew the four screws (A, Figure 3-1) that secure the cover to the bottom of the unit. Remove the cover.

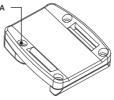


FIGURE 3-1. WIRELESS REMOTE CONTROL BATTERY INSTALLATION

- 2. Replace the battery with new one (CR2032, 3V). Install the battery, aligning their polarity markings (+/-) with those embossed on the compartment.
- 3. Replace the cover and tighten the screws (A).

## **4 WARRANTY INFORMATION**

## 4.1 WARRANTY INFORMATION AND REGISTRATION

#### 4.1.1 WARRANTY INFORMATION

This product is guaranteed to be free from manufacturing defects in material and workmanship under normal use for a period of three (3) years from the date of purchase. In the event that a defect covered by the warranty below occurs during the applicable period stated above, AGM Global Vision, at its discretion, will either repair or replace the product; such action on the part of AGM Global Vision shall be the full extent of AGM Global Vision's liability, and the Customer's sole and exclusive reparation. This warranty does not cover a product if it has been (a) used in ways other than its normal and customary manner; (b) subjected to misuse; (c) subjected to alterations, modifications or repairs by the Customer or by any party other than AGM Global Vision without prior written consent of AGM Global Vision; (d) is the result of a special order or categorized as "close-out" merchandise or merchandise sold "as-is" by either AGM Global Vision or the AGM Global Vision dealer; or (e) merchandise that has been discontinued by the manufacturer and either parts or replacement units are not available due to reasons beyond the control of AGM Global Vision. AGM Global Vision shall not be responsible for any defects or damage that in AGM Global Vision's view are a result from the mishandling, abuse, misuse, improper storage or improper operation of the device, including use in conjunction with equipment that is electrically or mechanically incompatible with, or of inferior quality to, the product, as well as failure to maintain the environmental conditions specified by the manufacturer. This warranty is extended only to the original purchaser. Any breach of this warranty shall be enforced unless the customer notifies AGM Global Vision at the address noted below within the applicable warranty period.

The customer understands and agrees that except for the foregoing warranty, no other warranties written or oral, statutory, expressed or implied, including any implied warranty of merchantability or fitness for a particular purpose, shall apply to the product. All such implied warranties are hereby and expressly disclaimed.

#### 4.1.2 LIMITATION OF LIABILITY

AGM Global Vision will not be liable for any claims, actions, suits, proceedings, costs, expenses, damages, or liabilities arising out of the use of this product. Operation and use of the product are the sole responsibility of the Customer. AGM Global Vision's sole undertaking is limited to providing the products and services outlined herein in accordance with the terms and conditions of this Agreement. The provision of products sold and services performed by AGM Global Vision to the Customer shall not be interpreted, construed, or regarded, either expressly or implied, as being for the benefit of or creating any obligation toward any third party of legal entity outside AGM Global Vision and the Customer; AGM Global Vision's obligations under this Agreement extend solely to the Customer. AGM Global Vision's liability hereunder for damages, regardless of the form or action, shall not exceed the fees or other charges paid to AGM Global Vision by the customer or customer's dealer. AGM Global Vision shall not, in any event, be liable for special,

indirect, incidental, or consequential damages, including, but not limited to, lost income, lost revenue, or lost profit, whether such damages were foreseeable or not at the time of purchase, and whether or not such damages arise out of a breach of warranty, a breach of agreement, negligence, strict liability, or any other theory of liability.

#### 4.1.3 PRODUCT REGISTRATION

In order to validate the warranty on your product, the customer must complete and submit AGM Global Vision PRODUCT REGISTRATION FORM on our website (www.agmglobalvision.com/ customer-support).

#### 4.1.4 OBTAINING WARRANTY SERVICE

To obtain warranty service on your unit, the End-user (Customer) must notify the AGM Global Vision service department via -email. Send any requests to support@agmglobalvision.com to receive a Return Merchandise Authorization number (RMA). When returning any device, please take the product to your retailer, or send the product, postage paid and with a copy of your sales receipt, to AGM Global Vision's service center at the address listed above. All merchandise must be fully insured with the correct postage; AGM Global Vision will not be responsible for improper postage or merchandise that becomes lost or damaged during shipment. When sending product back, please clearly write the RMA# on the outside of the shipping box. Please include a letter that indicates your RMA#, the Customer's Name, a Return Address, reason for the return, contact information (valid telephone numbers and/or an e-mail address), and proof of purchase that will help us to establish the valid start date of the warranty. Product merchandise returns that do not have an RMA# listed may be refused, or a significant delay in processing may occur. Estimated Warranty service time is 10-20 business days. The End-user/Customer is responsible for postage to AGM Global Vision for warranty service. AGM Global Vision will cover return postage/ shipping after warranty repair to the End-user/Customer only if the product is covered by the aforementioned warranty. AGM Global Vision will return the product after warranty service by domestic UPS Ground service and/or domestic mail. Should any other requested, required, or international shipping methods be necessary, the postage/shipping fee will be the responsibility of the End-user/Customer.

For service, repair or replacement, please contact:

#### AGM Global Vision

173 West Main Street PO Box 962 Springerville, AZ 85938 Tel. 928.333.4300 Fax 480.393.4882 support@agmglobalvision.com www.agmglobalvision.com

## **5.1 SPECIFICATIONS**

#### TABLE 5-1. SYSTEM DATA

ITEM		ANACONDA TC50-336 ANACONDA TC50-640			
Magnification		Unity (1x)			
Objective Lens	Туре	Germ	Germanium		
Detector		FLIR Tau 2 17µm Uncooled Microbolometer	FLIR Tau 2 17µm Uncooled Microbolometer		
Resolution		336x256	640x512		
Frame Rate		60 Hz	30 Hz		
Display Resolu	tion	800	800×600		
Display Brightr	iess	Discretely Adjus	Discretely Adjustable to 8 Levels		
Turn-on Time,	max	3 :	sec		
Temperature Imaging Modes (Image Palettes)		White Hot, Black Hot, Fusion, Rainbow, Globow, Ironbow 1, Ironbow 2, Sepia, Color 1, Color 2, Ice-Fire, Rain, and OEM			
User-adjustable Image Enhancement Tools		<ul> <li>Active Contrast Enhancement (ACE) - "CONTRAST"</li> <li>Second Generation Digital Detail Enhancement (DDE) - "SHARPNESS"</li> <li>Smart Scene Optimization (SSO) - "SMART SCENE"</li> <li>Automatic Gain Control (AGC) - "GAIN"</li> <li>User-Controlled Manual Non-Uniformity Correction / Flat-Field Correction (UCMNUC/FFC)</li> <li>Silent Shutterless NUC ™ (SSN)</li> </ul>			
	Accuracy	Factory aligned to 1 MOA or better			
Boresighting	Retention	Permanent to within 2 MOA or better			
	Repeatability	Within 2 MOA			
Analog Input/Output Format (Resolution)		NTSC*(640×480 pixels) / PAL (768×574 pixels)			
Interfacing		<ul> <li>Micro-USB (Power bank 5V)</li> <li>Universal S620 connector (Power In, Analog Video In/Out, Wi-Fi Attachment, HD Recorder, Extended Battery Pack)</li> </ul>			

\* Default setting

#### TABLE 5-2. OPTICAL DATA

ITEM		ANACONDA TC50-336	ANACONDA TC50-640
Field of View	- ang. X degrees	7.8	14.8
	- ang. Y degrees	5.9	11.8
Objective Focal Length		50mm	
Objective F-number		1:1	
Exit Pupil Diameter		40mm	25mm
Focus Method		Manual	
Focusing Range		5m to inf.	

#### TABLE 5-3. ELECTRICAL DATA

ITEM	DATA		
Battery	Two CR123A 3V Lithium batteries or CR123 type rechargeable batteries with voltage from 3.0V to 3.7V (2)		
Current Consumption, maximum	320 mA		
Battery Life at 20°C (68 °F)	Up to 4 hr. (optional up to 12 hr.)		
Extended Battery Pack	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 8 hr.)		
External Power Supply	Power bank (5V) via Micro-USB port; Extended battery pack (6V) or 6V/600 mA power supply via S620 universal connector		

#### TABLE 5-4. MECHANICAL DATA

ITEM	ANACONDA TC50-336	ANACONDA TC50-640	
Weapon Mount Type	Picatinny MIL-STD-1913 and Weaver Rails		
Overall Dimensions	217 × 71 × 81 mm (8.5 × 2.7 × 3.1 in)	208 × 71 × 81 mm (8.2 × 2.7 × 3.1 in)	
Height of the Scope Axis above Rail	40mm (1.57 in)		
Weight (w/o Batteries)	0.81 kg (1.8 lb)	0.7 kg (1.5 lb)	

#### TABLE 5-5. ENVIRONMENTAL DATA

ITEM	DATA
Operating Temperature	-40 to +50°C (-40 to +122°F)
Storage Temperature	-50 to +70°C (-58 to +158°F)
Recoil Resistance	700 g
Environmental Rating	Waterproof

#### TABLE 5-6. WIRELESS REMOTE CONTROL DATA

ITEM	DATA
Туре	Wireless Remote Control
Working Range	Up to 0.5m
Battery	Single CR2032 Lithium battery (3V)
Battery Life at 20°C (68 °F)	Approx. 10,000 clicks
Overall Dimensions	48 × 39 × 18 mm (1.9 × 1.5 × 0.7 in)
Weight (with Battery)	25 g (0.9 oz)
Operating Temperature	-30 to +50°C (-22 to 122°F)
Storage Temperature	-50 to +70°C (-58 to 158°F)
Environmental Rating	Water and Fog-Resistant

#### TABLE 5-7. SCOPE MOUNTING SYSTEMS DATA (ANACONDA TC50-640)

SCOPE MOUNTING SYSTEM	WEIGHT, G	OVERALL DIMENSIONS, MM	DIAMETER OF THE INSERTS, MM	CLEAR APERTURE OF DAY SCOPE LENS, MM	EXAMPLE OF THE SCOPES
Scope			25,4		Leupold 1.5-5x20 PR
Mounting System 1	53	39.5×43×52.4	30,0	20; 24	Leupold 1.5-5x20 MR/T M2; Zeiss 1.1-4x24T
Scope			38,0		Meopta Artemis 2000 4x32
Mounting System 2	61	44×49×62	42,0	32; 36	Leupold Mark 4 3-9x36; Leupold Mark 4 2.5-8x36; Kahles 4x36
	71	44×57.5×71	46,7	40; 42	Leupold 3.5-10x40; Leupold VX-II 3-9x40
Scope			48,0		Zeiss 1.5-6x42; Swarovski PV-N 2.5-10x42
Mounting System 3			48,7-49,0		Meopta Artemis 3000 3-9x42
			49,5		Meopta Artemis 3000 4-12x40
			50,0		Schmidt & Bender 10x42
	82	44x65.5x79	56,0	50	Zeiss 2.5 10x50
Scope Mounting			57,0		Schmidt & Bender 3-12x50
System 4			58,7		Leupold 4.4-14x50; Leupold VX-III 3.5-10x50
Scope Mounting System 5	93	44x70.5x84	62,0	56	Zeiss 3-12x56; Swarovski 2.5-10x56; Kahles CSX 3-12x56

## APPENDIX

## A. SPARE PARTS LIST

The parts authorized by this list of spare parts are required for the equipment operator maintenance. The list includes parts that must be removed in order to replace authorized parts.

The PART NO. column indicates the primary number used by the manufacturer to identify an item, which controls the design and characteristics of that item by means of its engineering drawings, specifications, standards, and inspection requirements.

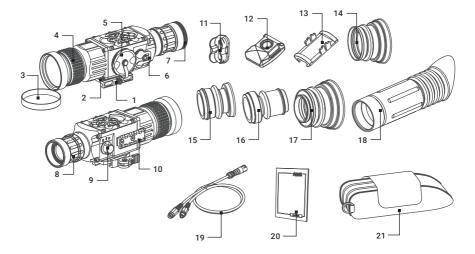


FIGURE A-1. ANACONDA SPARE PARTS LIST

ITEM	DESCRIPTION	PART NO.
1	Mount	AGMANQRM
2	Riser	AGMANRSR
3	Objective Lens Cap	GOL500BLCP
4	Objective Lens Assembly	GOL500BLAS
5	Battery Cap	AGMTIDBCP
6	Connectors Cap	AGMTIDCNCP
7	Output Lens Cap 640	AGMANOPLC6
-	Output Lens Cap 336	AGMANOPLC3
8	F25 Output Lens Assembly	AGMANF250LA
-	F40 Output Lens Assembly	AGMANF400LA
9	Operation Switch	AGMTIDOPSW
10	Side Picatinny/Weaver Rail	AGMTIDSPR
11	Battery Cassette	AGMTIDBTCS
12	Wireless Remote Control	AGMTIDWRC
13	Picatinny Adapter for Wireless Remote Control	AGMTIDPARC
14	Light Suppressor for Anaconda TC50-336	AGMLTSP4
15	Light Suppressor 1	AGMLTSP1
16	Light Suppressor 2	AGMLTSP2
17	Light Suppressor 3	AGMLTSP3
18	Light Suppressor for Day Scope	AGMLSDS
19	Video Cable	AGMTIDVCB
20	Operation and Maintenance Manual	AGMANOMM
21	Carrying Case	AGMRSCC

#### TABLE A-1. ANACONDA SPARE PARTS LIST



### **AGM Global Vision**

MAIN OFFICE 173 West Main Street PO Box 962 Springerville, AZ 85938 USA Tel. +1.928.333.4300 Fax +1.480.393.4882 info@agmglobalvision.com www.agmglobalvision.com

#### EUROPEAN OFFICE

Andrey Lyapchev #7 Sofia, P.C. 1756 Bulgaria Tel. +44.292.255.0509 info@agmglobalvision.eu www.agmglobalvision.eu

#### AGMglobalvision.com