

PYTHON-MICRO

THERMAL IMAGING RIFLESCOPE

USER MANUAL

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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

WARNING:

The proper usage of the device is important for safe exploitation!
Therefore read carefully the present manual!

WARNING:

If the device was left in storage for a longer period of time, before exploitation check its functionality.

WARNING:

Disassembling of the device is prohibited, except in authorized repair centers.

WARNING:

The external optical surfaces should be clean at all times. Touching the optical surfaces with bare hands is not recommended.

WARNING:

Sand and sea water can damage the optical coatings!

WARNING:

Do not point the device directly at the sun!

WARNING:

Image performance is dependent on scenery and atmosphere conditions. Contrast in the same image may vary as a function of the time of day due to the effect of the sun. For example, at sunset objects will have absorbed different levels of heat resulting in greater temperature differences and better contrast.

WARNING:

When left in storage for a longer period of time, batteries have to be removed and stored in polyethylene bags to prevent contact with metal. (It is recommended to recharge the batteries every two to three months.)

WARNING:

When carrying or transporting the device, put the protective lens cap!

WARNING:

Condensation can cause fogging of the optical surfaces! Condensation occurs when the temperature or humidity changes as follows:

- When moving the device from cold to warm place or vice versa;
- In places with high humidity.

When equalizing the temperature of the device with the environmental, the condensation disappears. Use the towel to remove moisture.

WARNING:

Clean the lens surfaces with the lens cloth or with the napkin!

LEGAL NOTICE

Before attaching to weapons, check the regional legal regulations in the area of application. The attachment to a weapon is always the sole responsibility of the user.

1 GENERAL INFORMATION

1.1 SYSTEM DESCRIPTION

The AGM Python-Micro TS35 and Python-Micro TS50 are the compact thermal imaging scopes developed for 24 hours operation under any weather and environmental conditions. Two objective lens options allow the customer to choose perfect unit for your needs where 35 mm lens designed for short range shooting, while the 50 mm lens model will be great for medium range missions.

Powered with two CR123 batteries the AGM Python-Micro gives up to 5 hours of continuous operation time. An external 5V power bank (battery pack) can be easily connected via a USB connector for a significant increase of operating time. Onboard Wi-Fi module for live video streaming and video/images recording via application are also available.

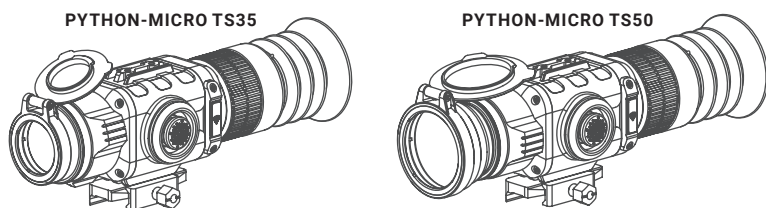


FIGURE 1-1. PYTHON-MICRO THERMAL IMAGING RIFLED SCOPES SERIES

1.2 MAIN FEATURES

- Lightweight and compact design
- Easy to operate device
- Electronic accuracy correction
- Automatic or manual (silent) calibration
- High resolution OLED display
- Wi-Fi data transmission
- Video/images recording
- Waterproof, shockproof
- Powered by two standard CR123A batteries
- External power supply capability
- Video output for external monitor or recorder
- Limited 3-year warranty

1.3 MAIN PARTS AND COMPONENTS

The Python-Micro is shown in Figure 1-1. The ITEM column of Table 1-1 indicates the number used to identify items in Figure 1-2.

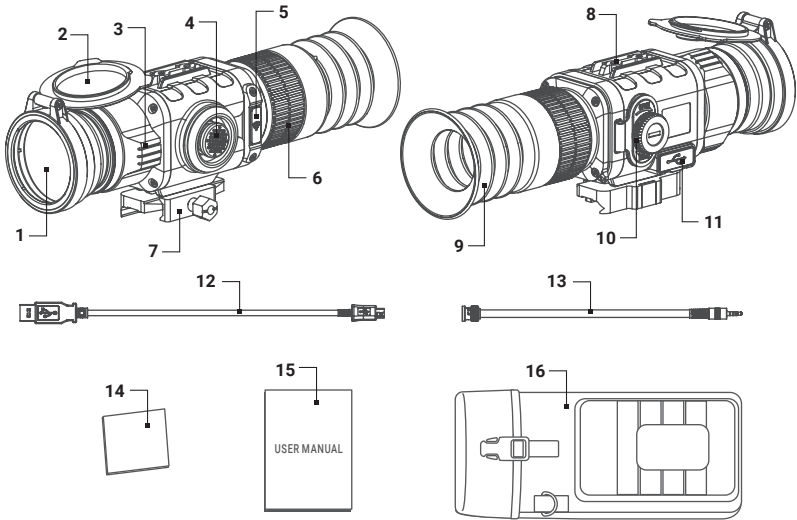


FIGURE 1-2. PYTHON-MICRO MAIN PARTS AND COMPONENTS

TABLE 1-1. PYTHON-MICRO MAIN PARTS AND COMPONENTS

ITEM	DESCRIPTION	ITEM	DESCRIPTION
1	Objective Lens	9	Eyecup
2	Objective Lens cover	10	Battery Compartment
3	Objective Focus Ring	11	USB and Video Connectors
4	Operation Joystick	12	USB Cable
5	Wi-Fi Antenna	13	Video Cable
6	Eyepiece Focus Ring	14	Lens Tissue
7	Mount	15	User Manual
8	Extension Interface	16	Carrying Case

2 OPERATING INSTRUCTIONS

2.1 INSTALLATION AND MOUNTING

2.1.1 UNPACKING

The following steps must be completed prior to each mission.

1. Open the carrying bag, remove the device, and verify that all components are accounted for.
2. Inspect the device for any obvious evidence of damage to the optical surfaces, body, operation joystick, etc. Ensure that all optical surfaces are clean and ready for use. Clean all optical surfaces with a lens tissue.

2.1.2 BATTERIES INSTALLATION

Turn the battery cover knob clockwise until stop and remove the cover from battery compartment (see the Figure 2-1, OPEN position). Install two CR123A batteries in opposite polarity direction (Figure 2-2).

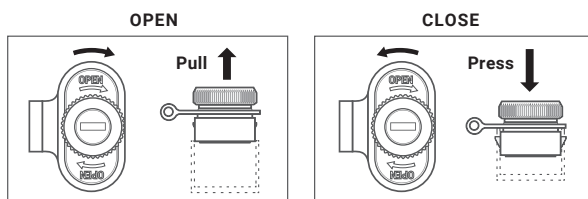


FIGURE 2-1. BATTERY COMPARTMENT

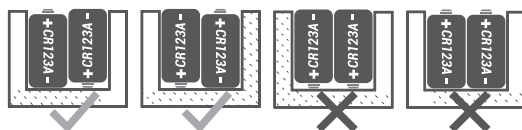


FIGURE 2-2. BATTERY POLARITY

Turn the battery cover knob counterclockwise until stop. The latches from both sides of the cover will pull out. Replace the battery cover and press it until its clicking position. (see the Figure 2-1, CLOSE position). Make sure the cover is closed on both sides.

Battery charge level is displayed on the status bar (Figure 2-3).

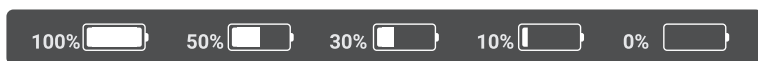


FIGURE 2-3. BATTERY STATUS BAR

WARNING:

Do not use rechargeable batteries since their use causes inaccurate battery level indication and possible disconnection during operation.

NOTE:

Please do not use batteries of different types or batteries with various charge levels.

2.1.3 INSTALLING THE PYTHON-MICRO ON A PICATINNY/WEAVER RAIL

The Python-Micro can be attached to the Picatinny-style rail. To do this, loosen the fixation screw of the mount (Figure 2-4, A). Place the scope onto the Picatinny rail, and verify that the mount aligns with the rail. Tighten the fixation screw.

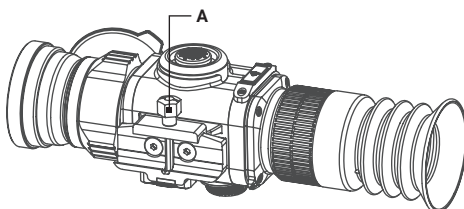


FIGURE 2-4. INSTALLING THE PYTHON-MICRO

2.1.4 VIDEO CABLE CONNECTION

Video cable serves for the connection with an external display monitor. Install the cable refer to Figure 2-5.

Open the cover of the Python-Micro connectors. Plug the cable to the mini-jack 3.5mm connector.

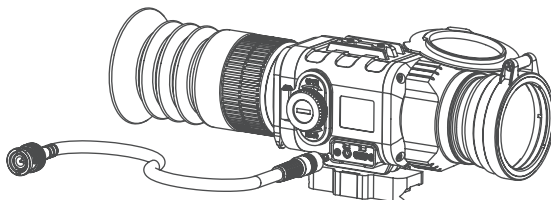


FIGURE 2-5. VIDEO CABLE CONNECTION

2.1.5 USB CABLE CONNECTION

The USB cable enables connect the device to your PC to export the recorded videos and captured snapshots, use the external power source (power bank, 5V USB) for extended operational time, update the device's firmware to the latest version.

Connect the USB cable as follows (refer to Figure 2-6):

1. Open the cover of the Python-Micro connectors.
2. Plug the USB cable to the micro-USB connector of the Python-Micro. Plug the other end of the cable to the external equipment.

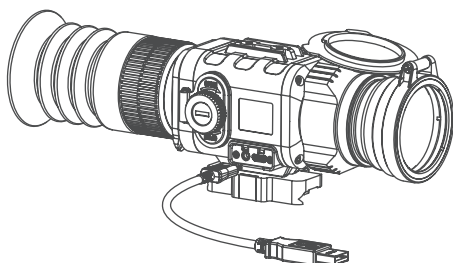


FIGURE 2-6. USB CABLE CONNECTION

WARNING:

Do not disconnect the cable during data transfer.

2.2 CONTROLS AND INDICATION

2.2.1 CONTROLS

ATTENTION:

The main operations are performed through the operation joystick.

The Python-Micro controls are shown in Figure 2-7. The ITEM column of Table 2-1 indicates the number used to identify items in Figure 2-7.

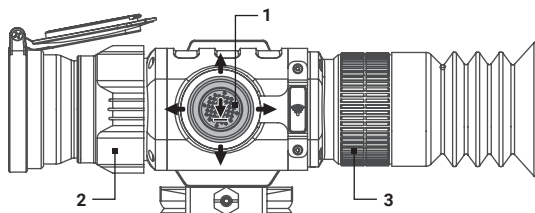







FIGURE 2-7. PYTHON-MICRO CONTROLS

ATTENTION:

Turn off the device after usage, otherwise you can permanently damage the batteries!

TABLE 2-1. PYTHON-MICRO CONTROLS

ITEM	CONTROLS	OPERATING MODE	FIRST SHORT PRESS	LONG PRESS
1	 Joystick Button Push	Real time image	Non-Uniformity Correction (NUC)	ON / OFF
		Quick Menu	Exit Quick Menu	
		Main Menu	Confirm selection	
	 Joystick Up	Real time image	Bring out Quick Menu	Enter Main Menu
		Quick Menu	Change parameters	
		Main Menu	Change parameters	
	 Joystick Down	Real time image	Bring out Quick Menu	NA
		Quick Menu	Change parameters	
		Main Menu	Change parameters	
	 Joystick Left	Real time image	Bring out Quick Menu	NA
		Quick Menu	Switch function	
		Main Menu	Select Setting options	
	 Joystick Right	Real time image / Wi-Fi On	Take a photo	Start/Stop video recording
		Quick Menu	Switch function	NA
		Main Menu	Select Setting options	
2	Focus Ring	Focuses the objective lens for the sharpest image		
3	Eyepiece Focus Ring	Adjusts the eyepiece diopter		

NOTE:

Photo and video function are valid only when WiFi is on.

2.2.2 STATUS BAR

The status bar is located in the lower part of the display (Figure 2-8) and shows information about an actual operating status of the sight, including:

1. Color palette: C1/C2/C3/.../C10.
2. Zeroing profile A/B/C/D/E.

3. Rangefinder distance display.
4. Current digital Zoom magnification.
5. Wi-Fi status icon.
6. Battery charge with current level in percent.

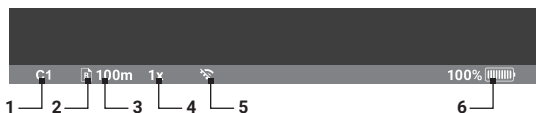


FIGURE 2-8. STATUS BAR

2.2.3 QUICK MENU

The Quick Menu allows change of basic settings. Enter the Quick Menu by short pressing the joystick in the direction of Up, Down, or Left. To toggle between the functions below, press the joystick Left or Right when Quick menu is in display. If select of Zoom, Palette, Brightness, Contrast, Sharpness functions do not take place in 5 second, the information disappear from display.



MANUAL (SILENT) CALIBRATION

Use manual Non-Uniformity Correction (NUC) function to improve image quality. Close the lens cover before calibration.



BRIGHTNESS

Press the joystick Up/Down to change image brightness from 0 to 9.



PALETTE

Basic image mode is "White Hot". Press the joystick Up/Down to select one of ten palette C1-C10.



ZOOM

Press the joystick Up/Down to set digital zoom to 1X, 2X, 4X, or PIP. Picture in inset window under PIP mode is 2X digital zoom.



CONTRAST

Press the joystick Up/Down to change display contrast from 0 to 9.



SHARPNESS

Select one of three sharpness levels (Smooth/Normal/Sharp) with a short press of joystick Up/Down.



STADIAMETRIC RANGEFINDER

Python-Micro riflescopes are equipped with a stadiametric rangefinder which allows the user to estimate approximate distance to an object of known size.

You will see on the display: measurement bars, icons of three reference objects and respective distances for the three objects.

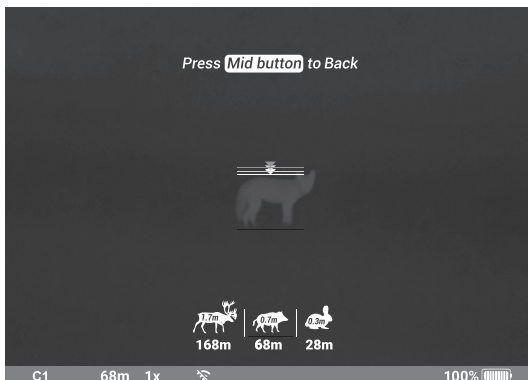


FIGURE 2-9. STADIAMETRIC RANGEFINDER

There are three pre-set reference objects:

Hare	- height 0.3 m
Wild boar	- height 0.7 m
Deer	- height 1.7 m

To select the unit of measurement (meters or yards), go to the respective menu option.



The lower fixed bar under the object automatically appear on display. Press the joystick Up/Down to move the upper horizontal bar until the object fits entirely between the two lines. The distance to the object is automatically recalculated as you move the upper pillar.

Press the joystick Left/Right to choose reference object. Distance to the object displays in status bar and a "> <" on reticle suggests the aiming point accordingly.

Press Middle button to exit rangefinder mode, range information will not disappear from display automatically.



WI-FI

Press the joystick Up/Down to turn Wi-Fi hotspot ON/OFF. Wi-Fi status is shown on the status bar. Icon  means Wi-Fi is off, icon  means Wi-Fi is on.

2.2.4 MAIN MENU

NOTE

Enter the main menu with a long press of the joystick Up. Press the joystick Left/Right to select between the main menu options.

All menu is displayed in the central area of the image. The reason is the reduced field of view of the day sight by higher magnifications. Reaching a low battery state the device gives a warning in the top left corner of the central area.



EXIT

Press the joystick Up/Down to Exit, the Main Menu will not disappear automatically.



AUTO NUC

Press the joystick Up/Down to turn Automatic Non-uniformity Calibration On / Off. In the automatic mode the need for calibration is based on software algorithm, calibration starts automatically. When choose Off, user will do calibration manually by either lens cover(silent without shutter) or press middle button (with shutter). Manual calibration function is in Quick Menu.



OLED BRIGHTNESS

Press the joystick Up/Down to set one of OLED brightness level from 0, 1, 2.



UNIT

Press the joystick Up/Down to select units of measurement (Yards or Meters).





DEFECTIVE PIXEL REPAIR

Press the joystick Up/Down then close lens cover to repair defective pixel. Defective pixels are found by software algorithm.



RETICLE

This main menu option allows you to select reticle shape and color. Enter submenu of "Reticle Setup" with a short press of Up/Down and you will see:



Select the desired reticle shape out of the list of 5 reticles with Up/Down. Press Right to move the Reticle Color selection.

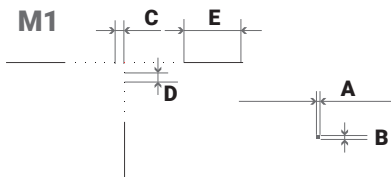


Select the desired reticle color Black, White, Red, or Green with Up/Down. Press Right to move to back.

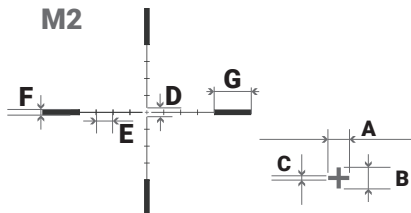


Press Up/Down to return to real time image with the reticle type and color you just chose.

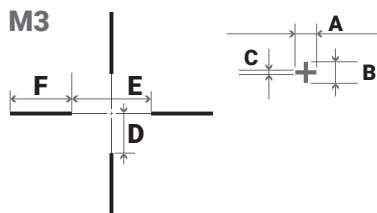
The Python-Micro includes five reticle patterns. The parameters of reticles you will see below:



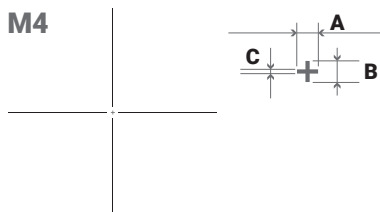
RETICLE PARAMETERS	MOA / CM @ 100 M (35MM)	MOA / CM @ 100 M (50MM)
Section A	0.58 / 2.4	0.58 / 1.7
Section B	0.58 / 2.4	0.58 / 1.7
Section C	5.8 / 2.4	5.8 / 17
Section D	5.8 / 2.4	5.8 / 17
Section E	37.7 / 156	37.7 / 110.5



RETICLE PARAMETERS	MOA / CM @ 100 M	
	(35MM)	(50MM)
Section A	2.9 / 12	2.9 / 8.5
Section B	2.9 / 12	2.9 / 8.5
Section C	0.58 / 2.4	0.58 / 1.7
Section D	6.38 / 26.4	6.38 / 18.7
Section E	11.6 / 48	11.6 / 34
Section F	4.06 / 16.8	4.06 / 11.9
Section G	26.68 / 110.4	26.68 / 78.2



RETICLE PARAMETERS	MOA / CM @ 100 M	
	(35MM)	(50MM)
Section A	2.9 / 12	2.9 / 8.5
Section B	2.9 / 12	2.9 / 8.5
Section C	0.58 / 2.4	0.58 / 1.7
Section D	29 / 120	29 / 85
Section E	58 / 240	58 / 170
Section F	46.11 / 19.08	46.11 / 135.15



RETICLE PARAMETERS	MOA / CM @ 100 M	
	(35MM)	(50MM)
Section A	2.9 / 12	2.9 / 8.5
Section B	2.9 / 12	2.9 / 8.5
Section C	0.58 / 2.4	0.58 / 1.7



RETICLE PARAMETERS	MOA / CM @ 100 M	
	(35MM)	(50MM)
Section A	0.58 / 2.4	0.58 / 1.7
Section B	0.58 / 2.4	0.58 / 1.7



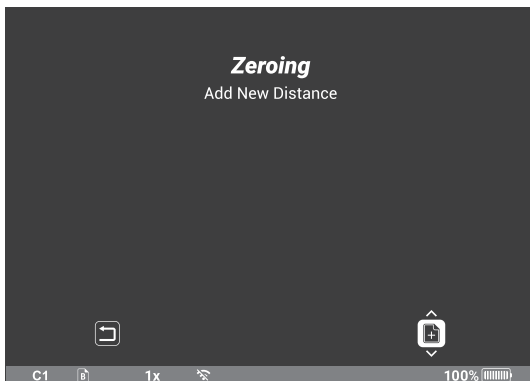
ZEROING PROFILE


Various profiles can be used when employing the sight on different rifles and when shooting different cartridges. Select one of the zeroing profiles (shown with letters A, B, C, D, E) with short press the joystick Up/Down. The name of selected profiles is displayed in the status bar.



ZEROING


To zero your weapon, you need to set a zeroing distance first. You can zero your weapon at any distance range from 1 to 999m. Enter submenu of “Zeroing” with a short press of the joystick Up/Down and you will see:




Select profile icon  and press Up/Down. You will see:



Set the value for each digit with press the Up/Down. Switch between the digits with a short press of Left/Right.

To clean the distance press Left/Right to move to , then short press Up/Down.

To confirm distance press Left/Right to move to , then short press Up/Down.

The distance you set shown above the status bar:



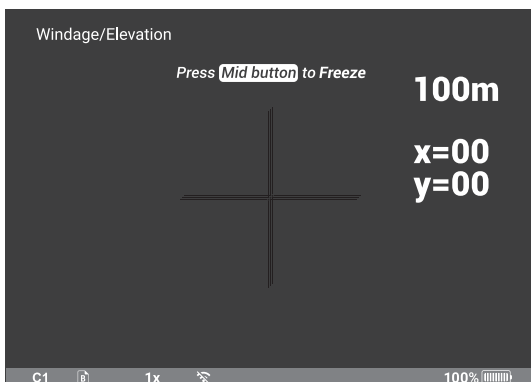
NOTE:

The system will switch to 1x magnification automatically after entering zeroing menu.

For more information on zeroing procedures, see Part 2.3.8.

OPERATE THE DISTANCE

Press Up/Down on distance icon, you will see:



Take a shoot, move Up/Down/Left/Right to make cross center of reticle at point of impact. X, Y will show the distance value you move.

Press middle button to Freeze and you will see:



Save

Press Up/Down to Save, you will see indication:



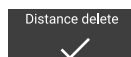
Back

Press Left, then short press Up/Down to return.



Delete

Press Left/Right, then short press Up/Down to Delete, you will see indication:



NOTE:

Zeroing information will be saved if the battery is removed after turning off the unit. If the unit is shut down by opening battery cover without proper power off, zeroing information will be lost.

NOTE:

In order to get precise ballistic trajectory, zeroing in 3 distances with 3 shots in each distance is recommended. The shortest distance should be no more than 100 meters.

Enter stadiametric rangefinder menu to enable distance information, yellow cross will serve the indication of aiming point.

If the distance data is not activated in the rangefinder menu, center of reticle indicates the aiming point according to the first added distance.



INFO

This option allows the user to view the following information about the imager.



RESTORE DEFAULT SETTING

Press the joystick Up/Down to Restore Default Setting, there will be no further indication.



The following settings will be restored to their original values before changes made by user:

- Zoom
- Image Brightness
- Contrast
- Sharpness
- OLED Brightness

2.3 OPERATING

2.3.1 TURNING THE DEVICE ON

Open the objective lens cover.

NOTE

The objective lens cover protects the scope from inadvertent exposure to extremely high levels of radiant flux. Never leave the scope without confirming that the objective lens is covered.

To turn the unit on push and hold the operation joystick.

2.3.2 FOCUSING

Adjusts the eyepiece diopter first. Rotate the eyepiece focus ring until the image becomes sharp. Then bring the object into focus. Rotate the front lens until the image becomes clear and sharp.

2.3.3 IMAGE ADJUSTMENT AND FUNCTIONS SETUP

Using the Quick Menu and Main Menu configure the device to adapt it to your situation. For more information on operational setting procedures, see Part 2.2.

2.3.4 CAPTURE SNAPSHOTS AND VIDEO RECORDING

NOTE

For on-board recording, turn the Wi-Fi on. Wait 10 seconds after Wi-Fi activation before photo/video recording.

If start earlier than in 10 second, even if the image numbers 001, 002, etc. are displayed in the upper left corner, the photos are not actually taken and saved, the video as well.

In the view mode, when there is no menu on the main screen, click right on the joystick to take a photo. Long press right on the joystick to start and stop video recording. Image or video status is shown on upper left corner of display. The images and video will be saved in the unit. The unit has 32GB of internal storage.

2.3.5 FILE EXPORT

To review the captured images or video, use the included USB cable to connect the unit to a computer.

1. Make sure the Wi-Fi is activated as well. Wait 10 seconds after turning the Wi-Fi function on.
2. Connect the Python-Micro to PC via USB interface refer to Section 2.1.5.
3. Enter to the Removable Disk Folder on PC (it can be named 'Camera').

If the folder is not shown, enter 'My Computer' and check if unit is connected. If not, make sure it is on as well as Wi-Fi function and try to reconnect.

4. Double-click to open the disk. The DCIM folder contains the folders with video and images. System creates the new folder each time when the device is activated and user provides photo or video recording.
5. View or copy videos and pictures.
6. Delete files in the unit memory to free space if it is required.
7. Disconnect the unit with the PC.

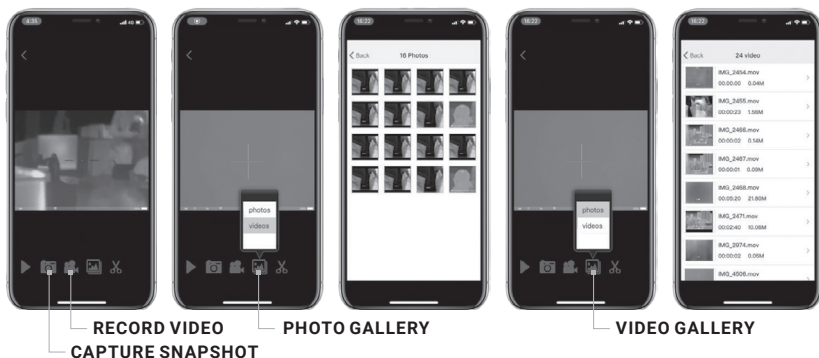
2.3.6 USING THE CAM802 APPLICATION

On-board Wi-Fi module is used for live video streaming and video/images recording via app.

1. Install the CAM802 client software on smartphone first. It can be located on the App Store for Iphone or here (<https://apkpure.com/cam802/com.linkcard.cam802>) for Android.
2. Turn on Wi-Fi function of Python-Micro. Go into phone settings and connect to the unit via Wi-Fi. The default password is '12345678'.
3. Open the app. Once the app is open it may ask to setup. After setup the home screen will be shown.
4. In the home screen there is a large circular button in the center that says 'Connect Cam802'. Press that button to start streaming the live thermal view to smartphone. There will be several icons at the bottom of the screen that will allow to record, take photos, and review them as well. Photo and video records will be saved on the smartphone.

Capture Snapshots and Video Recording by Cam802 Application:

1. Turn on Wi-Fi function of Python-Micro. Wait for 10 seconds.
2. Press the Photo Camera icon on application main screen to take a photo. Do not press too quickly, always wait until image number disappears before taking next photo.
3. Press the Video Camera icon on application main screen to record a video. Always wait until video is saved before starting the next recording.
4. Wait another 10 seconds before turn the Wi-Fi function off.



NOTE

Do not take photos/videos while the device is connected with PC. Otherwise the photos/videos will not be actually saved.

2.3.7 SHUT DOWN OPERATIONS

To prepare the device for storage:

1. Turn the device OFF. Push and hold the operation joystick.
2. Place the protective cover over the objective lens.
3. Disconnect the cable or adapters (if applicable). Place the protective caps over the connector sockets.
4. Return the scope and any accessories to the case.

2.3.8 ZEROING





Correct position of the device

When zeroing the optic, the first thing you will need to do is make sure the optic is mounted securely to the rail and with the proper eye relief.

Start off the process with a target up close around 10 yards. Placing a small piece of aluminum foil on the target, allows for the heat collection and easier to sight in. Make sure the foil is angle slightly towards the sky to make sure it reflects a different temperature as the rest of the target. If you have a 'hold over' target that shows the offset for your preferred zero distance at 10 yards that can help speed up the process.

Preparation for zeroing

Turn the unit on. Use the joystick to scroll to the 'Zeroing profile' option of main menu (see Section 2.2.4, page 17). Press joystick up or down to set the optic on a particular profile. There are 5 profiles to be used for separate calibers or separate zero distances. Once you have selected the profile you wish to use scroll right once to the 'Zeroing' option.

Press up to select the zeroing option. The screen will then show a 'Back' option  and an option to add a distance  (see Section 2.2.4, page 18). Scroll to the icon  and press up to add a distance. It will then allow you to add a distance by pressing up or down on the joystick to scroll through the numbers. Once you have entered the distance you plan to zero at you can scroll to the icon  with a check sign on it. Press up on that icon to save the distance.

At this point you have created a zero distance under one of the profiles. The purpose of this is to remind you what distance you are setting the profile to. You should be at the initial zeroing screen Scroll to the distance you just created and press up to set the zero.

Zeroing procedure

You should now be on the actual zeroing screen. It should say 'Press mid button to freeze' at the top of the screen. It should also display an X and Y coordinate value on the screen (see Section 2.2.4, page 19). The default is '0.0' for both. Being that this is a digital adjustment we are going to bring the reticle to the point of impact as opposed to a mechanical adjustment optic where we make adjustments to bring the impact to the reticle. As an example, if your impact is low and left we would need to move the reticle low and left. The coordinates will reflect this value. This is opposite of a normal

daytime scope where you would need to move the impact up and right and your turret adjustments would in turn be up and right.

Each 'click' (or short press of the joystick) to the right or left along the 'X' axis will adjust for windage. The same is true for the 'Y' axis as it will adjust for elevation. Each click will adjust for two pixels in terms of elevation and four pixels in terms of windage. This is reflected on the coordinate values as 0.4 for elevation and 0.8 for windage. Each 'click' of elevation is closer to about 1/4 MOA and windage is closer to about 1 MOA.

Make sure you have a very stable shooting platform and you are using the ammo you wish to have zeroed to the gun. Different ammo will have a different trajectory and your zero will be different. Also note that once the optic is removed from the gun we recommend confirming zero once the optic is remounted to the gun. The same is true if you were to drop the gun in the field, if you were to travel to a place with much different environmental conditions, or if you were to change certain parts on your gun (muzzle device, gas system, etc.).

You can fire your first group at this point. We recommend taking one initial shot to get an idea of how much adjustment will be needed. If you do decide to shoot at 10 yards and you have a 5.56 AR15 with our standard height mount your impact should be roughly 2.5 inches below your point of aim for a 200 yard zero. Once you are on or close at 10 yards you should move the target to the desired distance and make any additional adjustments needed.

Once you have completed all your necessary adjustments you can press the joystick inward to save the zero. It will take you to a screen that says 'Save' at the top. Press the joystick upward to save. The unit will confirm it is saved and take you back to the 'Zeroing' menu. You can go back and exit the menus at this point.

The device has the ability to enter multiple zeros under one profile. Perhaps it is better not to do this, as this can add a lot of confusion. Therefore, add only one distance to the each profile if you use only one gun. The profile will always be by default at the first distance below it, and now there is a way to quickly switch.

2.3.9 MAINTENANCE

1. Gently brush off any dirt from the body of the device using a clean, soft cloth.
2. Moisten the cloth with fresh water and gently wipe down the external surfaces (except lenses).
3. Dry any wet surfaces (except lenses) using another dry, clean, soft cloth.
4. Using a lens brush, carefully remove all loose dirt from the lenses.
5. Dampen a cotton swab with ethanol and slowly, gently wipe down the lenses. Clean the glass surfaces using circular movements, starting from the center of the lens and moving out towards the edge, without touching the lens holder. Change the cotton swab after each circular stroke. Repeat this step until the glass surfaces are clean.

2.3.10 PREPARING FOR EXTENDED STORAGE

To prepare the Python-Micro for extended storage:

1. Remove the batteries.
2. Clean the device and accessories.
3. Place all items into the storage case.

3 WARRANTY INFORMATION

3.1 WARRANTY INFORMATION AND REGISTRATION

3.1.1 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 below warranty 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.

3.1.2 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.

3.1.3 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).

3.1.4 OBTAINING WARRANTY SERVICE

To obtain warranty service on your unit, the End-user (Customer) must notify the AGM Global Vision service department via e-mail. 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:

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4 SPECIFICATIONS

4.1 SPECIFICATIONS

The following tables provide information pertaining to the operational, electrical, mechanical, optical, and environmental characteristics of the Python-Micro.

TABLE 4-1. SPECIFICATIONS

	PYTHON-MICRO TS35	PYTHON-MICRO TS50
Microbolometer		
Type	Uncooled	Uncooled
Resolution	384×288	384×288
Frame Rate	50 Hz	50 Hz
Pixel Size	17 μm	17 μm
NETD	Less than 50 mK	Less than 50 mK
Optical Characteristics		
Objective Lens	35mm, F/1.1	50mm, F/1.1
Magnification	1.9x	2.7x
Zoom	2x/4x/PIP(2x)	2x/4x/PIP(2x)
Eye Relief	60 mm	60 mm
Dioptr Adjustment	-5 to +4	-5 to +4
FOV	10.6° × 8.0°	7.4° × 5.6°
Close-up Range	5 m	5 m
Display		
Type	OLED	OLED
Resolution	1024×768	1024×768
Detection Range (1.7m target)	1350 m	1800 m
Recognition Range (1.7m)	450 m	600 m
Detection Range (2.3m target)	1800 m	2400 m
Recognition Range (2.3m)	600 m	800 m

Power Supply		
Battery Type	2 x CR123	2 x CR123
External Power Supply	5 V USB	5 V USB
Battery Life (Operating, 20°C)	5 hrs	5 hrs
System		
Video Recording	On-board video recording	
Snapshot	On-board image capturing	
Storage	32 GB built-in memory	
Wi-Fi	Built-in Wi-Fi module (hotspot)	
Data Transmission	- Live video streaming via WiFi (APP) - Video/image recording via WiFi (APP) - Video/image files export via USB	
Boresighting		
Windage Boresight increment	1.2 MOA	0.8 MOA
Elevation Boresight increment	0.6 MOA	0.4 MOA
Physical Parameters		
Degree of Protection	IP66	IP66
Operation Temperature	-25°C to +50°C	-25°C to +50°C
Storage Temperature	-40°C to +60°C	-40°C to +60°C
Shock and Vibration	1200 g/ms	1200 g/ms
MTBF	More than 800 hrs	More than 800 hrs
Weight (w/o batteries)	0.41 kg (0.9 lbs)	0.43 kg (0.95 lbs)
Dimension	184 × 61 × 67 mm (7.2 × 2.4 × 2.6 in)	201 × 65 × 67 mm (7.9 × 2.5 × 2.6 in)



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