FORTUNA

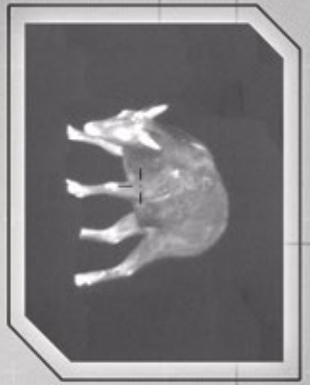


MULTIFUNCTIONAL THERMAL IMAGING DEVICE

FORTUNA GENERAL

25M3 • 25L3 • 40M3 • 40L3
50M3 • 50L3 • 25M6 • 25L6
40M6 • 40L6 • 50M6 • 50L6

USER'S MANUAL



USER'S MANUAL

MULTIFUNCTIONAL THERMAL IMAGING DEVICE FORTUNA GENERAL

For models:
25M3, 25L3, 40M3, 40L3, 50M3, 50L3,
25M6, 25L6, 40M6, 40L6, 50M6, 50L6

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1. General Information

In this manual you can find the instructions for use, maintenance and servicing of the thermal imaging devices FORTUNA GENERAL series. In the further manual these devices are referred to as «device», «scope» or «monocular» depending on the application in the manual context.

Attention!
It is absolutely forbidden to point the device at the high-temperature objects (the sun, welding, fire, etc.)

2. Device Features and Application

2.1. Application

The thermal imaging device FORTUNA GENERAL is developed to aiming or viewing both in the darkness (at night) and in the daytime in normal or severe weather events, such as the mist, light rain, snow, fog and smoke. The device detects passively the thermal radiation of objects and landscapes, is flash resistant and does not need additional source of light. Although the device limits the visibility through glass, water, heavy rain or snow.

The device detects passively the thermal (infrared) radiation of objects and landscapes and does not need additional source of light. Although the device limits the visibility through glass, water, heavy rain or snow.

The device can be used as a weapon-mounted scope or a handheld monocular.

The device is designed with the shutterless calibration technology enabling quick start and continuous image without stops and delays. The specially developed control electronics of the device works without complicated menu. Ballistic corrections and 4 memory slots enable saving zeroing profiles for different distances and different types of ammunition.

The device is reliable, compact and user-friendly. All the main functions are easily and ergonomically controlled. Each scope has passed the pre-sale impact, vibration and freezing tests.

2.2. FORTUNA GENERAL Series Features:

- observing and aiming at any time of the day and in poor weather conditions;
- 384x288/640x480 core, 17 μm, 50/25 Hz;
- maximal detecting distance – from 475 to 1320 meters;
- 12 different models in the series;
- compact and light hand-sized device;
- metal enclosure with rubber grips;
- waterproof enclosure filled with dry nitrogen;
- stands against the recoil of large-calibre weapon;
- high-aperture germanium lens;
- colour high-resolution AMOLED display 800x600;
- multi-functional digital menu;
- silent electronic calibration;
- video output for external video recorder;
- possible connection to external power supply.

3. Shipping Kit

The shipping kit of the FORTUNA GENERAL thermal imaging device is listed in table 1.1.

Table 1.1.

FORTUNA GENERAL thermal imaging device	1
Power batteries CR123	2
User's manual	1
Pouch (case)	1
External power supply cable	1

4. Accessories

Upon request the shipping kit can include::

- 5V external power supply;
- Video recorder to save image on the SD card;
- Mount for any weapon allowing the installation of this type of scopes;
- Hard case for carrying and storage of the device.

5. Specifications

Table1.2 provides the information on physical, electrical, mechanical, optical and performance specifications of FORTUNA GENERAL thermal imaging devices.

Table 1.2

Model	25M3	25L3	40M3	40L3	50M3	50L3
Thermal imaging core	384x288, 1717 µm					
Spectral range, µm	7,5…14					
Frequency, Hz	50					
Sensitivity, mK	<50					
Calibration	silent, electronic					
Lens	25 mm, F/1.0		40 mm, F/1.0		50 mm, F/1.2	
Optical zoom	2,1	1,8	3,4	2,8	4,2	3,5
Field of View, deg	14,6 x 11,1		9,3 x 7,0		7,4x5,6	
Lens focusing, m	Fixed, from 10 to ∞				Manual, from 5 to ∞	
Pace of corrections, distance 100m, cm	3,4		2,1		1,7	
Eye relief, mm	25	52	25	52	25	52
Dioptric adjustment	-5…+5					
Display	AMOLED 800x600					
Power supply	up to 8.5V (CR123A x 2 pcs. or RCR123 x 2 pcs.)					
Minimal continuous run time at 25°, h	5					
Protection class	IP67					
Maximum impact load, g	500					
Operating temperature range, ℃	-30…+50					
Dimensions, mm	65x52x165	65x52x195	55x72x195	55x72x225	57x74x189	57x74x239
Weight with batteries (CR123A x 2 pcs)	~480	~520	~580	~620	~710	~740

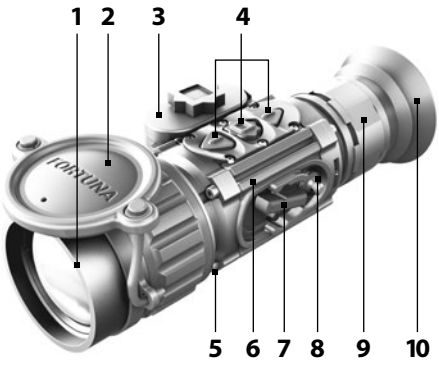
The producer reserves the right to change without notice technical specifications and shipping kit of the device.

	25M6	25L6	40M6	40L6	50M6	50L6
	384x288, 17 17 µm					
	7,5…14					
	25					
	<50					
	silent, electronic					
	25 mm, F/1.0		40 mm, F/1.0		50 mm, F/1.2	
	1,3	1,06	2,0	1,7	2,5	2,1
	23,5 x 18,1		15,2 x 11,5		12,3x9,3	
	Fixed, from 10 to ∞				Manual, from 5 to ∞	
	5,7		3,5		2,8	
	25	52	25	52	25	52
	-5…+5					
	AMOLED 800x600					
	up to 8.5V (CR123A x 2 pcs. or RCR123 x 2 pcs.)					
	5					
	IP67					
	500					
	-30…+50					
	65x52x165	65x52x195	55x72x195	55x72x225	57x74x189	57x74x239
	~480	~520	~580	~620	~710	~740

6. Device Design and Controls

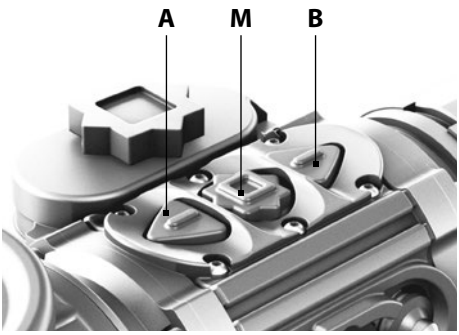
Fig.1 and 2 show the view, main units and controls of the device

Fig.1



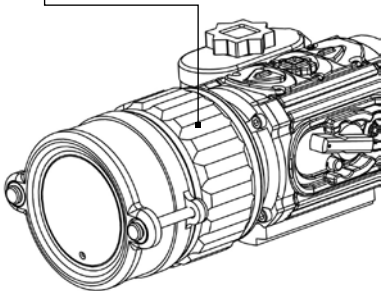
1. **Lens**
2. **Protective cap**
3. **Battery pack**
4. **Control buttons**
5. **Support mounting interface**
6. **Device enclosure**
7. **On/Off lever**
8. **Video output and external power supply socket**
9. **Eyepiece dioptric adjustment ring**
10. **Eyeguard**

Fig. 2



High-aperture germanium lens (1) in the enclosure focuses thermal radiation of the object on the sensitive area of the detector - uncooled bolometer core. When not operated the lens is closed with the protective cap.

Attention!
For models 50M3, 50L3, 50M6 and 50L6 the lens is focused by rotating the ring.



The other models do not require the lens focusing.
The objective lens does not rotate!

On top of the device enclosure (6) there is the panel (4) with the mode control buttons (fig. 1). The enclosure (6) contains the electronics of the device, which transforms the detector signal into the digital image of the object shown on the colour AMOLED display through the eyepiece with eyeguard (10), fig.1.

Dioptric adjustment of the eyepiece is performed with the ring (9), fig.1.

The electrical circuit of the device is powered with two batteries CR123A placed in the battery case (3), fig. 1. The door of the battery case is locked with the screw.

The device turns on and off with the lever (7), fig. 1. The universal socket (8) covered with the protective cap serves to connect the external power supply and to output video image on the external display or recorder (fig. 1).

The impact-resistant design of the device stands against the recoil of large-calibre weapon. To install the device on the weapon use the mounting interface for the support (5), fig. 1.

7. Operation

7.1. Unpacking

Prior to unpacking the device, make sure that all the main components are present in compliance with cl.3 of this manual. If some of the items listed in cl.3 are missing, please, address the Supplier. Prior to turning on the device, visually inspect the enclosure, optical surfaces and other parts of the device. Make sure there are no fractures, scratches, caverns, cracks and other faults in the view of the scope and its parts. Otherwise address the Supplier or the Manufacturer of the device.

7.2. Installing the Batteries

Prior to inserting the batteries make sure they do not have any cracks, caverns, leaks or bubbles. Never insert defective batteries. Do not use together new and old batteries or batteries of different types (of different manufacturers). The device is powered with two CR123A batteries or rechargeable batteries of RCR123A (16340) type.

Insert the batteries:

1. Open the battery door by loosening the screw counterclockwise;
2. 2. Insert the batteries observing the polarity marked inside the battery case;
3. Close the door and tighten up the screw clockwise

Attention!
Li-Ion battery contains SO2 (sulphur dioxide) under pressure. Do not heat, pierce, disassemble, short-circuit, recharge or in any other way put pressure on the battery.
Turn the device off if the battery case is overheated. Wait until the battery cools prior to reinstall it.
Do not store or transport the device with the inserted batteries.

7.3. Turning On and Off

The device turns on and off with the lever (7), fig. 1. The switch has two positions: «ON» – the lever in the upper position and «OFF» – the lever in the lower position.

7.4. Dioptric Adjustment of Eyepiece

The eyepiece's dioptric adjustment range is from -5 to +5 dioptres. Turn the eyepiece dioptric adjustment ring (9), fig.1 to achieve the sharp display image (icons, reticle).

7.5. Calibration

All FORTUNA GENERAL models feature the electronic calibration. The user does not need to calibrate the device while operating it. The device is calibrated automatically as required.

Nonetheless the device features the manual calibration function. If the image quality seems to be deteriorated, perform the manual closed lens calibration.

1. Make sure the protective cap on the lens is closed;
2. Press simultaneously and hold (more than 10 sec) buttons (M) and (B).

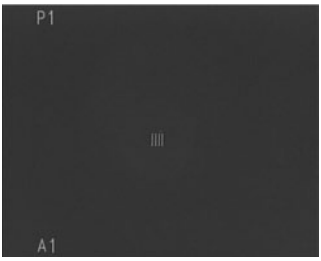
8. Electronic Adjustment of the Device

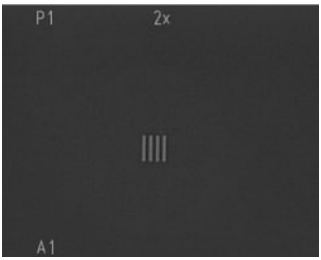
8.1. Main Menu

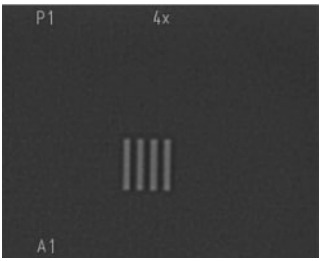
When the device is started the manufacturer's logo is shown, and when the device is loaded the thermal image of the observed object is shown. Use the control panel (fig.2) for adjustment and menu navigation.

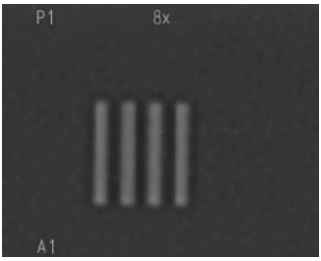
The dispaly shows:

at the top center of the screen – digital zoom (if any);







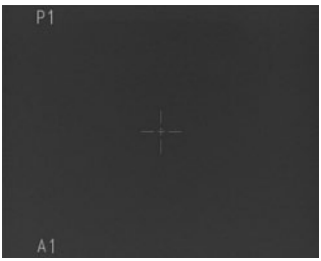


in the lower left corner – the image profile number;





if the scope mode is on, the display shows the reticle.



This menu enables the following adjustments:

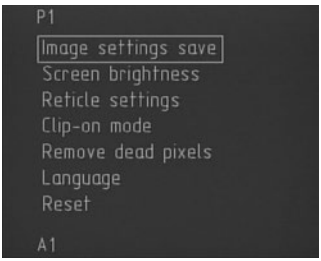
- digital zoom (see cl. 8.3);
- reticle on/off (see cl. 8.8);
- adjustable parameters – brightness, contrast, thermal sensitivity (see cl. 8.4);
- image colour (see cl. 8.5);
- zeroing profile (se cl. 8.10.1);
- image profile (see cl. 8.6).

8.2. Settings Menu

To enter the settings menu press and hold for 2-3 sec the button (M) on the button control panel (4).

The settings menu looks as follows:

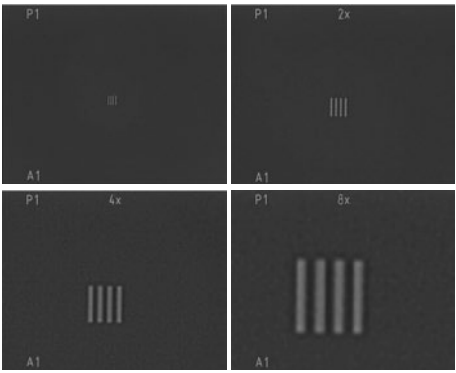
- SAVE IMAGE PROFILE – saving image profile (see cl. 8.7);
- DISPLAY BRIGHTNES – display brightness adjustment (see cl. 8.9);



- RETICLE SETTINGS – menu of reticle and zeroing settings (see cl. 8.10);
- ATTACHMENT MODE – switching into the front attachment mode (see cl. 10);
- CORRECTION – correction of the dead pixels (see cl. 11);
- LANGUAGE – selecting the menu language (see cl. 8.11);
- RESET – factory reset (see cl. 8.12).

8.3. Digital zoom

The button (A) on the button control panel (4) pressed shortly changes the digital zoom of the device to 2x, 4x (for models with 640x480 core resolution – 2x, 4x and 8x). The display shows the digital zoom rate (2x, 4x or 8x).



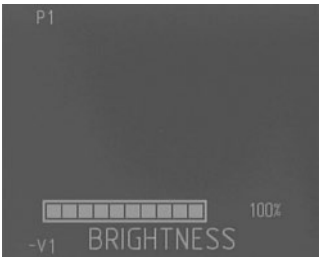
8.4. Selecting Adjustable Parameters

The device features manual adjustment of brightness, contrast and thermal sensitivity aimed to make the viewing conditions more comfortable.

8.4.1. Brightness Adjustment

To adjust brightness in the main menu press button (M) on the button control panel (4) until the brightness adjustment menu appears.

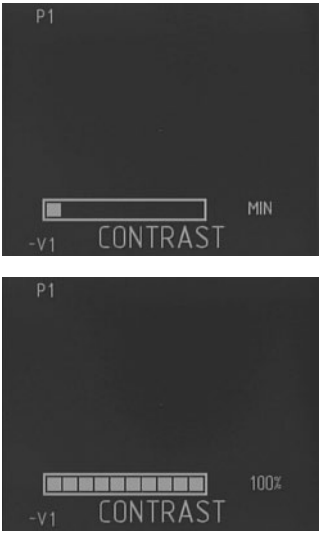




Select the required brightness level by pressing button (A) or (B). Press and hold (more than 2 s.) the button (A) to enter the main menu or continue the device adjustment and select another parameter by pressing shortly button (M).

8.4.2. Contrast Adjustment

To adjust contrast in the main menu press button (M) on the button control panel (4) until the contrast adjustment menu appears.



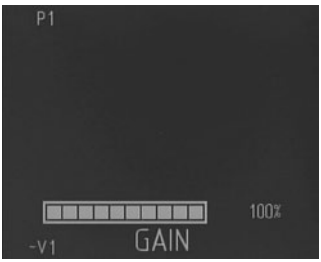
Select the required contrast level by pressing button (A) or (B). Press and hold (more than 2 s.) the button (A) to enter the main menu or continue the device adjustment and select another parameter by pressing shortly button (M).

8.4.3. Manual Adjustment of Thermal Sensitivity

To improve the quality of the observed image (depending on the contrast of the observed object and the background temperature) the device features the manual adjustment of the core (microbolometer) sensitivity.

To adjust the sensitivity in the main menu press the button (M) on the button control panel (4) until the thermal sensitivity adjustment menu appears.



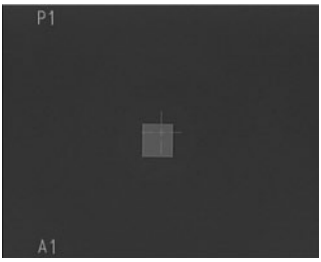


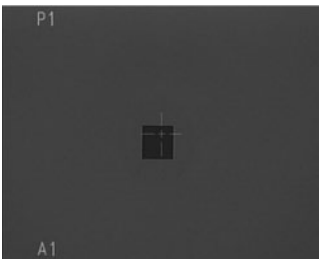
Select the required thermal sensitivity level by pressing button (A) or (B). Press and hold (more than 2 sec.) the button (A) to enter the main menu or continue the device adjustment and select another parameter by pressing shortly button (M).

Image profiles A1 and A2 feature manual adjustment of thermal sensitivity only.

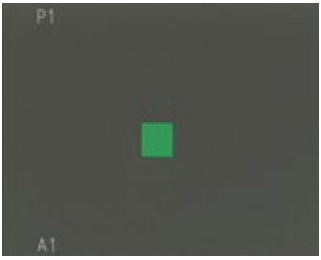
8.5. Selecting the Image Colour

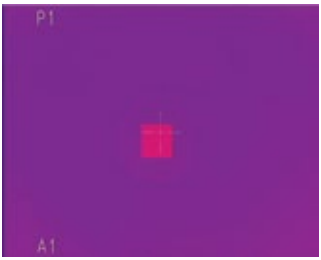
Button (B) on the button control panel (4) pressed shortly selects one of the modes: «white – hot» or «black – hot».

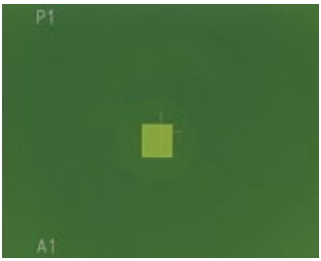


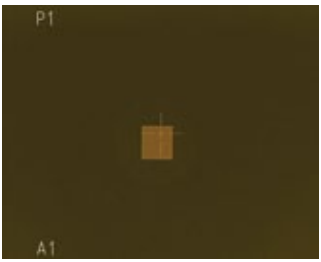


Press simultaneously and hold (for more than 3 sec.) buttons (A) and (M) to select the image colour pallet. The pallets are switched in loop.

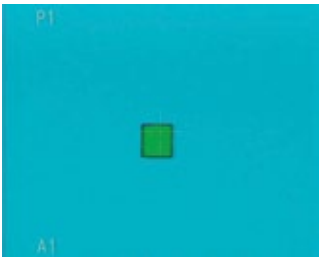


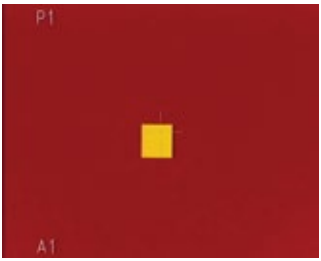

P1
A1


P1
A1


P1
A1

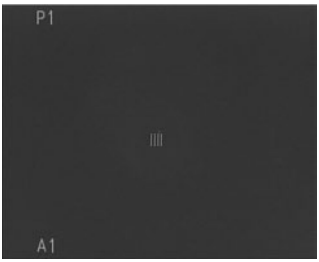

P1
A1


P1
A1


P1
A1


P1
A1

8.6. Selecting the Image Profile





Press and hold (more than 3 s.) button (B) to select one of the three saved image profiles (V1, V2, V3) or to turn on profile A1 or A2 where only thermal sensitivity level can be adjusted.

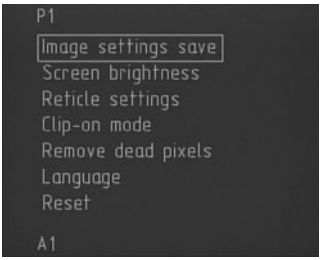
When any parameter is changed, the symbol «~» appears before the profile icon indicating that the profile changes are not saved. To save the image profile see cl.8.7.

8.7. Saving Image Profile

To make the usage of the device more convenient the user can save three image profiles V1, V2 and V3 for brightness, contrast and thermal sensitivity settings.

Profiles A1 and A2 allow for manual adjustment of thermal sensitivity only and cannot be saved.:

1. adjust the required level of brightness, contrast and thermal sensitivity (see cl. 8.4.);
2. enter the device menu with the long push of button (M);



3. using buttons (A) or (B) select «SAVE IMAGE PROFILE» and enter it by pushing shortly button (M);
4. select the number of the image profile to be saved with buttons (A) and (B);



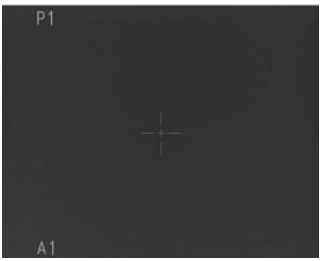
5. press and hold (more than 2s.) button (M) to save the profile. The message on the display will indicate that the profile is successfully saved. Press and hold (more than 2 s.) button (A) to exit the profile saving menu without saving the profile.



8.8. Turning On/Off the Reticle

The device can be used as a viewer or a scope.

When the device is used as a monocular the reticle and all its settings (colour, brightness, zeroing, etc.) can be turned off. When the device is used as a scope the reticle should be turned on. To turn on/off the reticle press and hold (more than 10 sec.) buttons (A) and (B). The zeroing profile number in the left upper corner and the reticle appear/disappear.

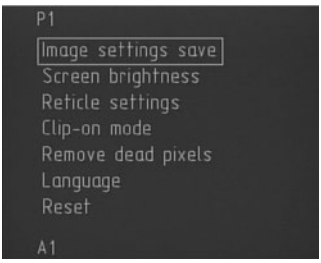




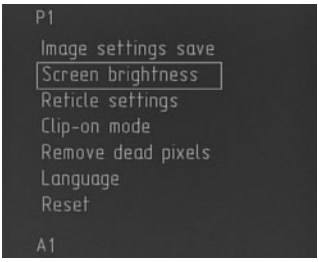
8.9. Display Brightness

Besides the thermal imaging core brightness adjustment the device features the display brightness adjustment. To adjust the display brightness:

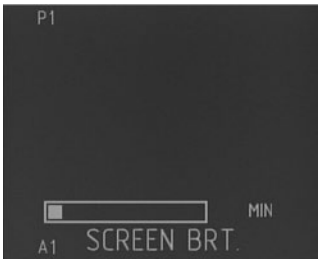
Enter the device menu with the long push (more than 2 sec.) of button (M);

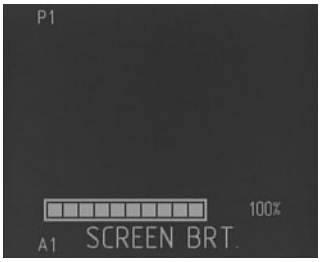


Using buttons (A) or (B) select «Display Brightness»



and enter it by pushing shortly button (M);

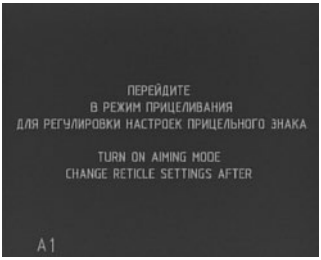




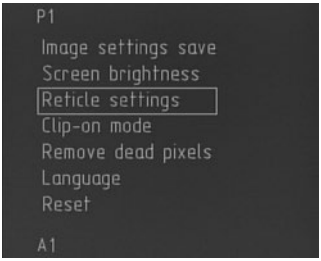
Select the display brightness level with buttons (A) and/or (B) and press and hold (more than 2 sec.) button (M) to save and exit to the menu. Press and hold (more than 2 sec.) button (A) to exit without saving.

8.10. Reticle Settings

Prior to entering the reticle settings menu make sure the reticle is turned on (see cl. 8.8.), otherwise when entering the menu the display will show the message that you should turn on the reticle.



To enter the reticle settings menu press shortly button (M).



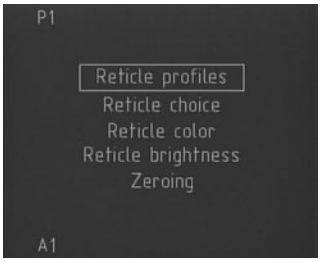
The menu contains the following settings:

- zeroing profile (see cl. 8.10.1);
- reticle type (see cl. 8.10.2);
- reticle colour (see cl. 8.10.3);
- reticle brightness (see cl. 8.10.4);
- zeroing (see cl. 9)

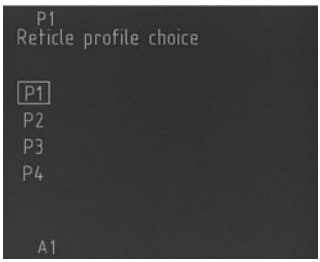
8.10.1. Selecting Zeroing Profile

In this menu you can select one of the four previously zeroed profiles.

To enter the menu press shortly button (M).



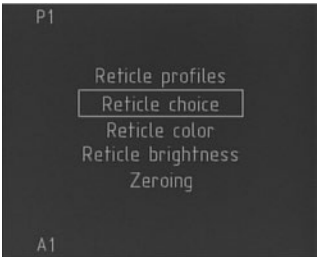
Use button (A) or (B) to select the required profile. Press and hold (more than 2 s.) button (M) to load the selected profile.



Press and hold (more than 2 sec.) button (A) to exit the menu without loading.

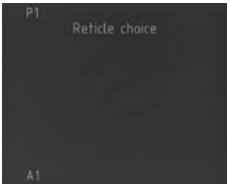
The zeroing profiles can also be switched by pressing and holding (for more than 3 sec.) button (A). The zeroing profiles are switched in loop.

8.10.2. Selecting the Reticle Type.

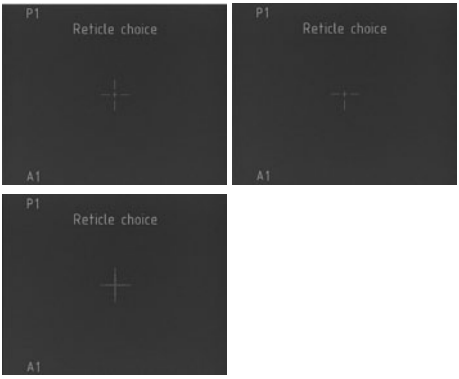


In the menu «Reticle Type» you can select one of the five types of the reticle (centre dot, German post, crosshair, chevron and Mil-dot). The Mil-dot reticle is available for models 40M3, 40L3, 40M3, 50L3, 40M6, 40L6, 50M6 and 50L6.

Attention!
Due to the small zoom of the devices the Mil-dot reticle pace at 1x digital zoom is TWO mils. At digital zoom other than 1x – ONE mil.



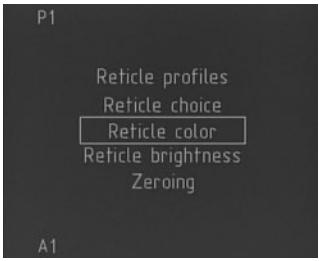


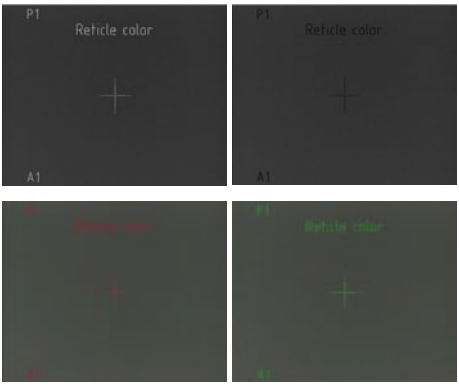


8.10.3. Selecting the Reticle Colour

In this menu you can select the colour of the reticle (black, white, red or green) depending on the selected image colour mode to make the reticle more distinctive against the background of the detected objects. To select the reticle colour:

- press shortly button (M) to enter the Reticle Colour menu;
- using button (A) or (B) select the required reticle colour;





- press and hold (more than 2 sec.) button (M) to save the reticle colour.

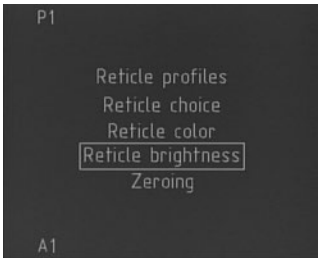
Press and hold (more than 2 sec.) button (A) to exit the menu without saving.

Attention!
The menu colour changes together with the reticle colour.

8.10.4. Reticle Brightness Adjustment

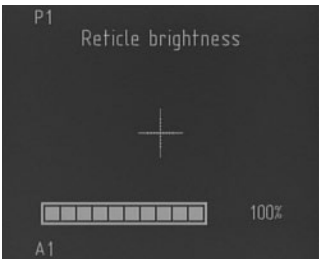
You can also select the reticle brightness level to make it more distinctive. To adjust the reticle brightness:

- press shortly button (M) to enter the Reticle Brightness menu;



- using button (A) or (B) select the required reticle brightness;





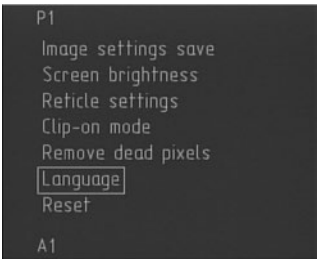
- press and hold (more than 2 sec.) button (M) to save the reticle brightness level.

Press and hold (more than 2 sec.) button (A) to exit the menu without saving.

8.11. Language

The device features the menu in two languages (Russian/English). To select the language:

- press shortly button (M) to enter the Language menu;



- using button (A) or (B) select the language;



- press and hold (more than 2 sec.) button (M) to save the language selection. Press and hold (more than 2 sec.) button (A) to exit the menu without saving.

8.12. Reset

To reset all the settings to factory defaults:

- press shortly button (M) to enter the Reset menu;



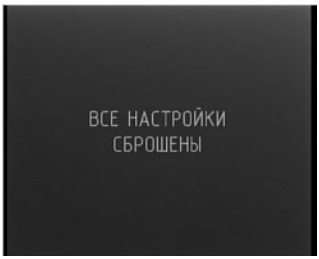
- using button (A) or (B) select Yes to submit the selection;





- press and hold (more than 5 sec.) button (M) to reset the settings to factory defaults. Press and hold (more than 2 sec.) button (A) to exit the menu without saving.

- After the settings are reset, the display will show the message confirming the reset.



9. Zeroing

The device zeroing is the alignment of the device reticle and the weapon mean point of impact (MPI). Zeroing is performed in a special equipped place using special equipment. The device is zeroed against the targets well detected with the thermal imaging scope.

The zeroing is performed as following:

- Turn on the device. Adjust the device to achieve the best target image.
- Set the target at the zeroing distance (depending on the weapon), so that the target is clearly viewed through the device.
- The weapon with the installed device should be fixated with special equipment. Fire 3-4 shots using the standard sight.
- Specify the shooting accuracy and the mean point of impact (MPI).
- Fire a shot using the device.
- If the reticle center does not match the MPI center, make corrections. Select the Zeroing menu and press shortly button (M).



- The reticle is moved by pressing buttons (A) and (B). The axis are switched by pressing shortly button (M). The active coordinate is framed. In the left upper corner X and Y coordinates are shown with respect to the screen center. Match the target center with the reticle center.









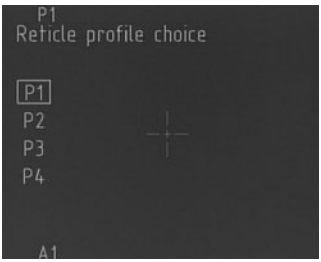
Attention!
When the corrections are entered it is the reticle that moves, not the MPI.

- If MPI deviates more than by the permitted value, re-enter the corrections.

If the zeroing results are satisfactory, select Save option and save the profile by pressing and holding (more than 2 sec) button (M), and the window of the profile selection will open.

Using buttons (A) and (B) select the profile number and press and hold (more than 2 sec) button (M) to save the zeroing results, and the display will show the message confirming the profile is saved.







Press and hold (more than 2 sec) button (M) on the Exit option to exit the zeroing.

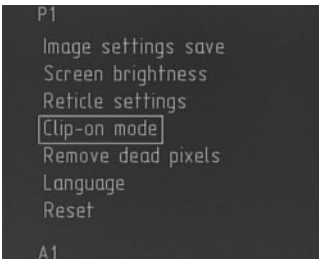


10. Application

10.1. Attachment Mode

The Fortuna General device can be used as a front attachment for day scopes (models 25A3, 40A6, 50A3, 50A6 и MLX).

To switch the device into the front attachment mode select the Attachment mode using button (A) or (B) and press shortly button (M) to enter the selected mode.





Attention!
After the device is turned off and turned on again, it remains in the attachment mode. The monocular/ attachment modes are switched only via the menu.

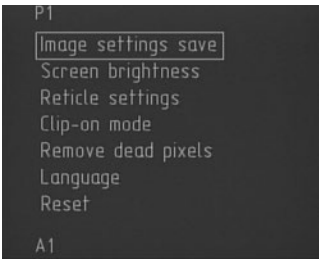
Attention!
The device in the attachment mode features 1x optical zoom only, without digital zoom.

For more information about using the device as a front attachment, see the User's manual for Fortuna General Clip-on and Fortuna General MLX series.

10.2. Monocular Mode

To switch back the monocular/scope mode:

- press and hold (more than 2 sec.) button (M) to enter the device menu;



- use buttons (A) and (B) to select the Monocular mode;
- press shortly button (M) to enter the selected mode.

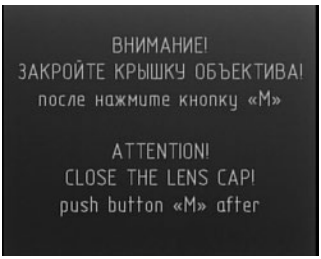
11. Pixel Correction

Due to the impact loads, defected or so-called “dead pixels” may appear in the micro-bolometer. A dead pixel on the display looks like a dot of constant color (black or white). The device features the correction function to correct the dead pixels.

Attention!
Correction shall be performed with the lens cap closed!

To enter the pixel correction menu press shortly button (M). The reminder to close the protective lens cap appears on the screen.





Make sure the cap is closed and press and hold (more than 2 sec.) button (M). The correction menu opens.



Attention!
Automatic mode cannot guarantee the complete removal of all the dead pixels. In this case the remaining pixels should be removed manually. Switch between the modes by pressing shortly button (M).

11.1. Automatic Dead Pixels Removal

To remove automatically the dead pixels press shortly button (M) to select the option «Auto» and press and hold button (M) to complete the removal. The display shows the message confirming the successful removal. If any pixels remain, remove them in manual mode.



11.2. Manual Dead Pixels Removal

To remove manually the dead pixels press shortly button (M) to switch between X and Y. With X selected buttons (A) and (B) move the cursor horizontally, and with Y selected – vertically. Align the cursor center with the dead pixel and press and hold button (M) for more than 2 sec.









11.3. Cancelling the Automatic Dead Pixels Removal

To cancel the automatic dead pixels removal press shortly button (M) to select the option Reset and press and hold (more than 2 sec.) button (M). The display shows the confirmation message.



To confirm, use button (A) or (B) to select Yes and press and hold (more than 5 sec.) button (M) to cancel the correction.

To exit without cancellation select No and press and hold (more than 2 sec.) button (M).





11.4. Saving the Correction Results

When the dead pixels are automatically or manually removed the result should be saved. Using button (M) select the Save option and press and hold (more than 2 sec.) button (M) to save the results. The message confirming saving was successful appears on the display.





11.5. Exiting the Correction Menu

To exit the correction menu select the Exit option and press and hold (more than 2 sec.) button (M).



12. Options

12.1. Attaching the External Power Supply (not included).

To increase the run time of the device it is possible to attach the external 5V power supply with a USB connector. Take off the safety cap from the socket (8) and using the cable supplied with the device, connect the external power supply to the device.

12.2. Attaching Video-Recorder (not included).

To record the process of zeroing, hunting, observation etc, the video-recorder (Newton CVR640 type) can be attached to save the image on the SD card. Take off the safety cap from the socket (8) and using a cable adapter (not included) connect the device to the video-recorder.

13. Troubleshooting

The device does not start:

1. No batteries >>> Insert the batteries
2. The batteries are low >>> Replace the batteries
3. Poor contact >>> Clean the contact pads.

Poor image quality.
Blurred image:

1. Dirty inlet objective lens or eyepiece >>> Clean the optics with spirit - ether mixture
2. The lens is not focused >>> Focus the optics
3. Low contrast due to rough conditions of observation; heavy rain, heavy fog, low temperature gradient of the observed objects.

Diagonal lines on the monitor:

1. The batteries are low>>> Replace the batteries.

No image:

1. Contrast and brightness are not adjusted >>> Adjust contrast and brightness.
2. The batteries are low >>> Replace the batteries.

14. Maintenance and Storage

14.1. Maintenance

The maintenance of the device includes visual inspection of its parts, cleaning and installing standard and optional accessories.

14.2. Cleaning

A) Cleaning the device.

1. Remove carefully the dirt from the device enclosure with clean and soft cloth.
2. Wet the cloth with water and wipe thoroughly the device surface (except optics).
3. Wipe the wet and clean enclosure with dry and clean cloth.
4. Using a soft brush remove carefully dust, sand and dirt from the optical surfaces.
5. Wet soft woollen cloth with the spirit-ether mixture and clean the optical surface of the lens and eyepiece with light twisting movements from the centre edgewards. Change the cloth after each wiping cycle. Repeat the actions until complete cleaning of the optics.

B) Cleaning the accessories.

Wipe the accessories with a brush or cloth wetted with soapy water (if required).

Attention!
Prior to put the device in the pouch or the case for storage, dry thoroughly each item from the scope kit.

14.3. Preparing for Storage

1. Check the condition of the device.
2. Remove the batteries.
3. Clean the device and its accessories.
4. Put the device and the accessories in the case (the pouch).

14.4. Storage

After usage and maintenance the device should be stored in the factory package as described in clause 14.3. This ensures that the device is kept ready to use for the whole guarantee period of storage and usage.

15. Warranty

Guarantee service life of the device is 24 months from the delivery date. Without the note on the delivery the guarantee period begins on the manufacturing date from the factory.

The warranty is effective only with the correctly filled user's manual with the serial number, delivery date and clear stamps of the supplier and manufacturer.

The guarantee repair is performed free of charge (including the cost of work, materials, and, if required, transportation) on the manufacturing factory or in the service company.

Any complaints about the item quality are considered after the quality inspection on the manufacturing factory. The decision on replacement or repair of the item or its parts is within the competence of the specialists of the manufacturing factory or the service. The replaced parts and units become the property of the manufacturer or the service-centre.

After the guarantee service the warranty period is not renewed but continues.

The liability under this warranty is limited with the liabilities specified in this document unless otherwise specified by the applicable law.

If during the usage of the item it is revealed that the parameters of the item do not correspond with the user's manual, please consult immediately with the manufacturer on the address and the phone numbers specified in the user's manual.

Within the whole guarantee period the owner has the right to free repair of the item's defaults resulting from the manufacturing faults.

The acquired item requires special installation (adaptation) on the weapon.

The items are accepted for the guarantee repair in set with the factory mount.

The manufacturer is released from all the warranty obligations in case of unassisted (unauthorized) installation of the item on the weapon or usage of self-made mounts (bars).

The manufacturer's warranty does not cover the following:

- Loss of the user's manual for the item;
- Alterations of the user's manual text, damage and alteration of the serial number or in the manual in case of their mismatch;
- Mechanical damage, damage due to the chemicals exposure or misuse;
- Usage of the item for improper applications;
- Damage or malfunctioning due to exposure to fire, corrosive substances, actions of animals or insects;
- Defaults due to force-majeure (fire, natural disasters etc.);
- Incompetent repair, disassemble or adaptation to the weapon and other interference of unauthorized persons not provided for by the manual;
- Damage resulting from disregard of rules of usage, storage and/or transportation by the fault of the owner, the transport company, service firm, persons or firms authorized for adaptation;
- Unauthorised alteration of the item's design including the adaptation on

the weapon or installation on the item of the adapters (mounts) of other design.

Warranty and post-warranty service and repair are performed at:

Fortuna Optics EOOD
Damyanitsa str. 2
Office 1, section «G»
1619 Sofia
Bulgaria
info@fortunaoptics.com
+359 88 2399915
+359 89 6682176

16. Acceptance Certificate

The thermal imaging device
FORTUNA GENERAL _____

Serial
number _____

complies with the design documents of the manufacturer and is considered ready for operations.

This type of products is not under mandatory certification.

Date of sale _____

Seller _____

Seal

Profile	Weapon	Calibre	Distance, m	Coordinates	
				X	Y
SAMPLE P1	Blaser	.30-06	100	+ 3	- 6

Manufacturer of thermal imaging devices Fortuna
Fortuna Optics EOOD

www.fortunaoptics.com

Damyanitsa str. 2
Office 1, section «G»
1619 Sofia
Bulgaria
info@fortunaoptics.com