

ThermalTronix
TT-JH Series
Thermal Imager
(Surveillance System Integration)

Quick Start





Warning

- Under no circumstances (on or off) to avoid the component detector window (without lens or lens) is directly aligned with the strong radiation source (such as the sun, laser, steel, etc.). So as not to cause irreversible damage to the detector, the detector may cause serious damage.
- In any case, you can not touch the detector window, in order to avoid the occurrence of the detector window dirt, grease and electrostatic damage, etc., and should pay attention to the detector is installed in the lens protection against wear detector window, scratches and even rupture happening, the above will result in a serious decline in component performance, and may even cause damage to the components.
- This component is a high-precision optical products, so the use, storage, transport process and should be properly guarded, rough handling (such as product to fall, resulting in a collision detector, shell damage, caused by internal wiring assembly process fracture product moisture, rain, etc.) may result in component performance degradation, severe cases may result in component damage.
- Make sure the cable is connected and reliable control tooling, such as the control of tooling line is bad or error status under the boot may cause component damage, severe damage the detector.
- When the component installation and connection, should be prepared to control the line of tooling and tooling plate protection, otherwise static electricity may cause performance degradation components, severe cases may cause the component is not working properly.
- If the product is not working properly, please contact our service department. Do not disassemble or modify this component in any way.
- Please use meets the specifications of the power supply, or may cause the component is not working properly, will cause serious damage to the components.
- This component is designed to provide users with common components provide secondary development, so different from the whole product with full protective measures, the user must pay attention to the process of developing a secondary protection. Due to the above components causes damage, the company will not assume responsibility for free repair.

Features

- ❖ TT-JH Series Thermal imager is an ideal option for integration, supply with DC12 input, RS-485 serial com, support PELCO-D/P protocol.
- ❖ Small size, lightweight.
- ❖ Multiple lenses optional, from 9mm to 150mm focal length.
- ❖ 640/384 resolution selectable.

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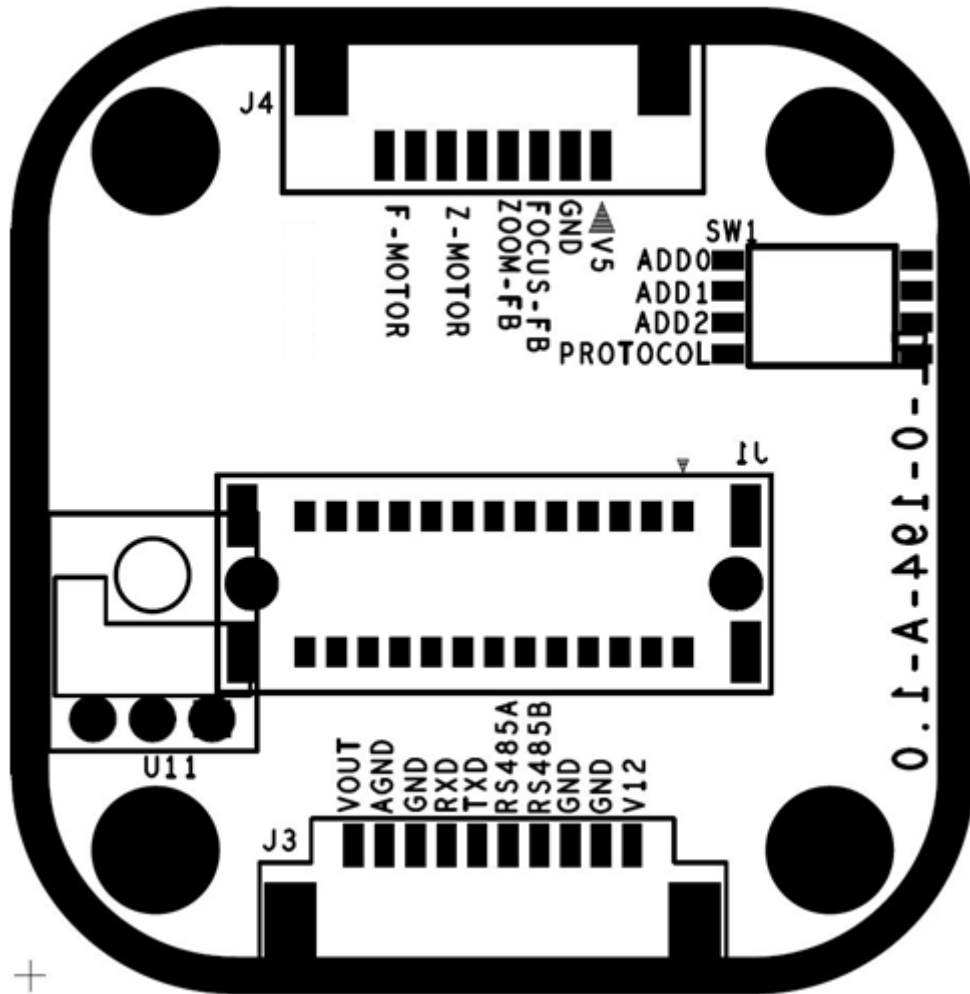
9/18/37/50mm lens mouting interface



Lens mounting for big lens (more than 50mm)



Basic feather board



J3 Pin Definition (Camera control)

I/O Connector	Pin#	Signal name	Definition	Mark
J3	1	VOUT	Analog video signal	
	2	AGND	Analog video ground	
	3	GND	Power ground	
	4	RXD	RXD	Firmware burning
	5	TXD	TXD	
	6	RS485A	RS485A	
	7	RS485B	RS485B	
	8	GND	Power ground	Power supply
	9	GND	Power ground	
	10	V12	DC12V	

J4 Pin Definition (Lens control)

I/O Connector	Pin#	Signal name	Definition	Mark
J4	1	V5	DC5V	Reserved for lens preset signal feedback
	2	GND	Power ground	
	3	FOCU-FB	Reserved	
	4	ZOOM-FB	Reserved	
	5	Z-MOTOR	Zoom- signal	
	6	Z-MOTOR	Zoom+ signal	
	7	F-MOTOR	Focus- signal	
	8	F-MOTOR	Focus+ signal	



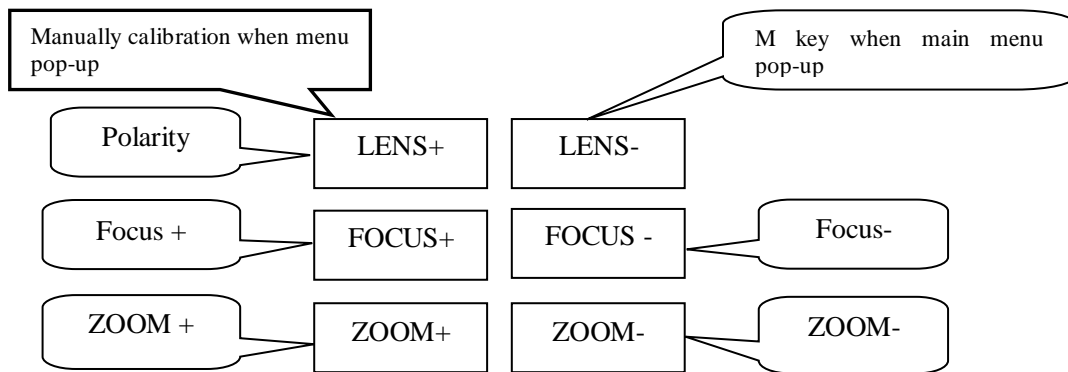
Sw1 switch Definition (address and Protocol option)

Connector	Pin#	Name					
SW1	1	ADD0	OFF	OFF	ON	...	ON
	2	ADD1	OFF	OFF	OFF	...	ON
	3	ADD2	OFF	OFF	OFF	...	ON
	4	PROTOCOL	OFF	ON	ON	...	ON
Address			0	0	1	...	7
Protocol			PELCO-P	PELCO-D	PELCO-D	...	PELCO-D

Default communication configuration:

Address: 1; Protocol: PELCO-D; baud rate: 2400

Communication commands



Call preset 100, menu pops-up, M key (lens-) to cycle the option, Focus \pm key to modify the value

Call preset 101, manually calibration

Call preset 102, electrical zoom pops up, Focus \pm key to change the value

Call preset 106, gain menu pops up, Focus \pm key to change the value

Call preset 107, brightness menu pops up, Focus \pm key to change the value

Call preset 108, shutter status option, Focus \pm key to change the status

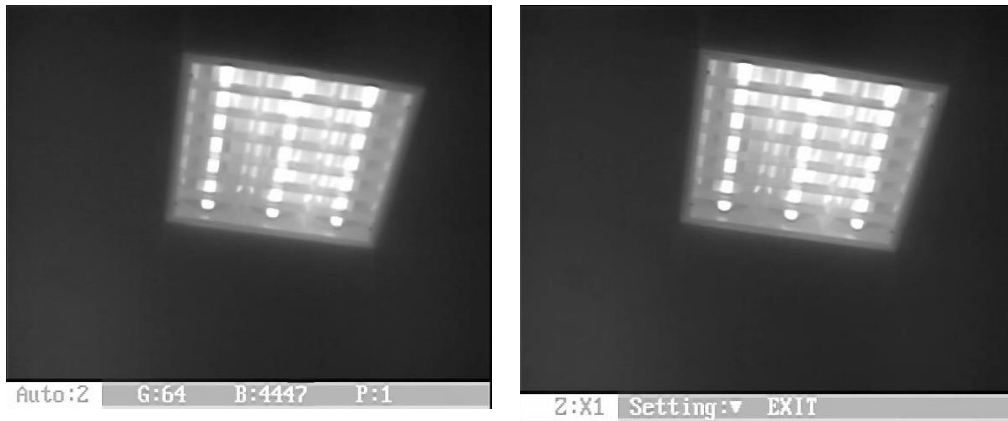
Call preset 109, enhance status menu pops up, Focus \pm key to change the value

Default communication configuration:

Address: 1; Protocol: PELCO-D; baud rate: 2400

Operating menu

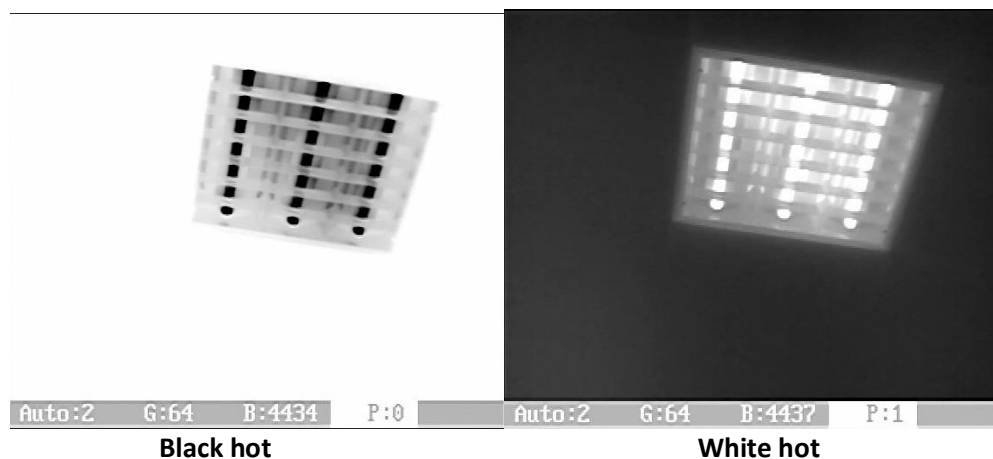
Send "call preset 100" command, activate the menu, refer to the image below:



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Press "LENS-" button to cycle the option, press "Focus+" and "Focus-" button to modify the value of option.

- 1. Auto: X** Image adjust mode
 - 0: manual brightness, manual gain mode
 - 1: auto brightness, manual gain mode
 - 2: auto brightness, auto gain mode
- 2. G** Stands for Gain
- 3. B** Stands for Brightness
- 4. P** Stands for Polarity (white/black hot), refer to the image below
 - 0: black hot 1: white hot



- 5. Z** Digital zoom (X1/X2/X3/X4)
- 6. Setting:** Pls contact manufacturer to get more details.

Warning: Do not enter "setting" menu, improper option may cause bad image quality and control issues (change parameters in "Com" option will cause communication problem, modify address and protocol of the camera on basic feature board if it's necessary)

- 7. Exit:** Press "Focus+" button or "Focus-" button to exit the menu