

User Manual AIRYN ATC-T series thermal cameras

Version 1.3

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Open Box

The box content includes 1x ATC-T series (ATC-TNC or ATC-T01) thermal camera, 1x HDMI right-angle cable and 2x AC to USB power adapters including 1x USB type-c cable.



Wiring and Installation



Installation

On the rear side of the camera there is a standard screw pin hole for mounting the camera on a tripod. Use a [mobile phone](#) to scan the QR code on the back to open the management GUI.



Wiring and power on

From the camera's front side open the left side handle. There are 4 ports available. From top to bottom: 1x USB-C port for the power adapter, 2x mini HDMI ports and 1x audio output. Use the USB-C port to power up the camera. Connect up to two monitors via the dual HDMI ports.



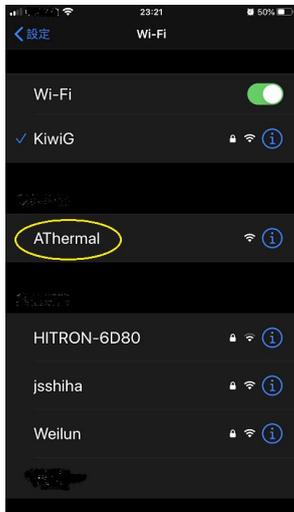
The upper yellow circle in the left picture is the USB-C port that connects to the AC power adapter via the USB type-c cable that is included in the packaging. The lower yellow circle indicates the mini HDMI port. Via the HDMI right-angle cable (included) and a HDMI cable (not included) the camera is able to connect to a HDMI monitor or screen. For the best resolution a FHD monitor or screen is recommended.



Press the power button on the front panel of the camera. A red light indicates that the power is on. No light indicates that the power is off. Plug in the power cable and the camera will turn on automatically. Press the power button for 2 seconds and the camera shuts down.



Access to management UI



The thermal camera has a default IP and wireless access point. Use your [mobile phone](#) to connect to the Wi-Fi access point “**AThermal**”. Once connected you can access the management UI.

Scan the QR code on the rear side of the camera with your mobile phone. Every camera has its own unique QR code. A web browser pops up and shows a full screen IP camera video and ¼ screen thermal imaging video.



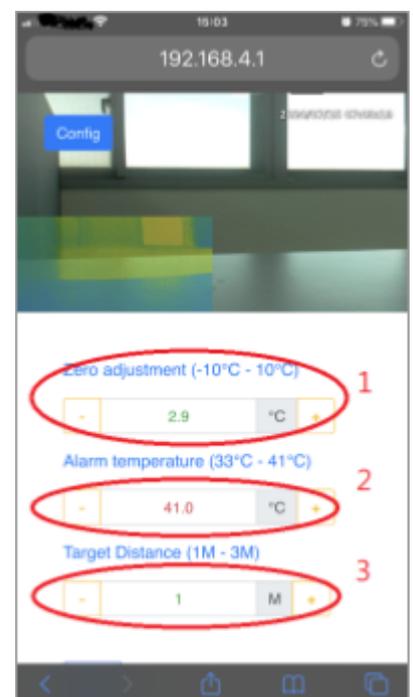
Body temperature management

Initial calibration



The start page enables operators to configure the body temperature management and calibration for the thermal camera. Press “Config” on your [mobile phone](#) screen. A page with camera settings pops up. To calibrate the camera it is important to set the reference temperature first. Use a forehead thermometer to determine the reference temperature. If the reference temperature with the forehead thermometer is 36°C and the thermal camera is measuring 37°C a calibration action of minus 1°C is necessary. Key in 1.0°C in the “zero adjustment” field (1). For the most accurate body temperature screening results it is best to perform this calibration action once after every power cycle.

After the initial calibration action the patented build-in calibration device will do the calibration automatically. It takes environment conditions like airrow, humidity and ambient temperature into account. Since environmental conditions are influenced by distance it is important to key in the “target distance” (3) from a person to the camera for the most accurate body temperature measurement.



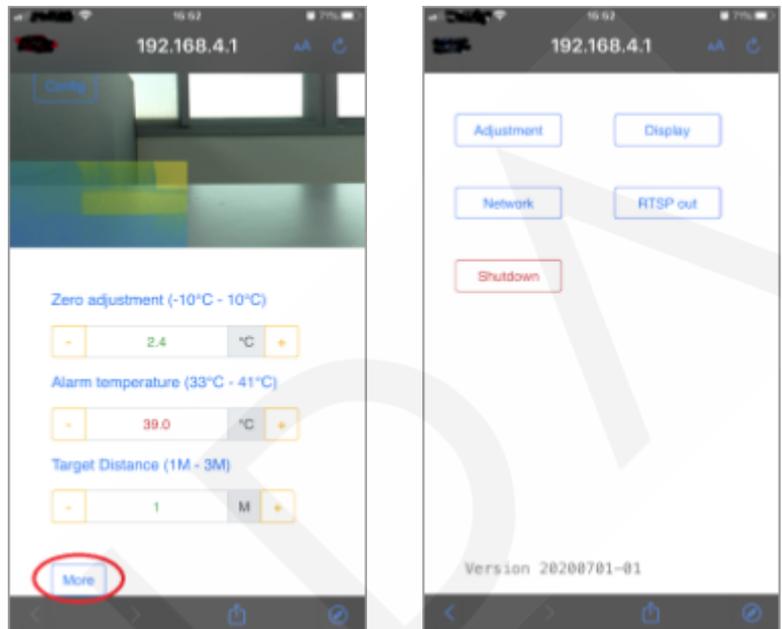
The Airyn ATC-T series thermal camera can act as a stand-alone device or as a network device. It triggers an alarm and sends out a notification when the body temperature exceeds a certain threshold set by the operator. This threshold is specified in the “alarm temperature” field (2).

System settings

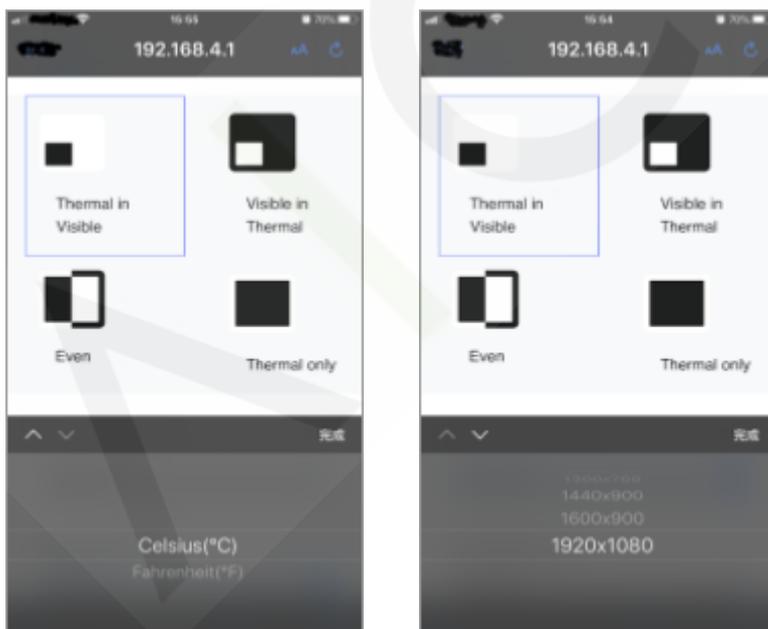
After finalizing the initial configuration press the “More” button on the mobile phone screen for more system settings.

Adjustment - Body temperature calibration

Press “adjustment” to go back and reconfigure the body temperature management and calibration of the thermal camera.



Display Mode - Display layout, resolution and temperature setting

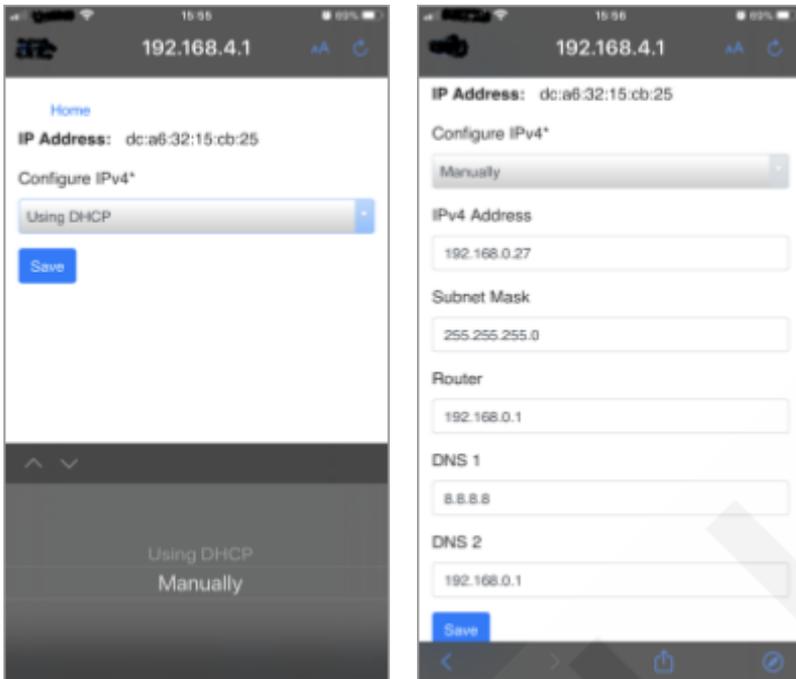


Press “Display” on the mobile phone screen to enter the display mode settings. With the available options it is possible to change the visual presentation on the external HDMI monitor or screen.

Scroll down to select the display resolution and / or select the preferred temperature setting (Celsius or Fahrenheit).

Recommended resolution external FHD monitor: 1920x1080.

Network - Static or DHCP



On the bottom of the camera there is one RJ45 port available to connect the camera to a network for RTSP streaming video data out.

It is not necessary to configure the IP address if the thermal camera is acting as a stand-alone device that is only connected to an external HDMI monitor or screen.

Press “Network” on the mobile phone screen to configure the IP settings. The default network IP setting is DHCP.

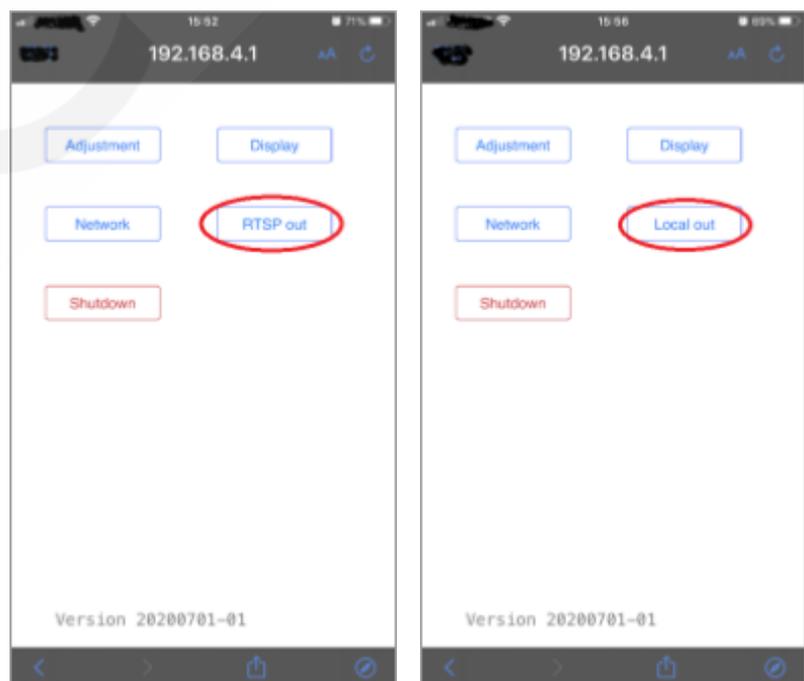
RTSP out - Switch video output to HDMI or RTSP

The button “RTSP out” makes it possible to switch the video output from RTSP to HDMI and vice versa. Press “RTSP out” on the mobile telephone screen to switch from “RTSP out” to “Local out”.

The option “RTSP out” directs the video stream via the RTSP protocol through the RJ45 port using the following URL:

rtsp://IP of physical port:8554/thermal
rtsp://IP of physical port:8553/visible

The option “Local out” is to switch the video stream back to HDMI output.



Shutdown system

Press “Shutdown” on the mobile phone screen to shutdown the thermal camera. The red light of the power button on the front panel of the camera turns off to indicate that the camera is successfully powered off.



Color map for thermal data

It is possible to download a color map for users that like to stream thermal images to backend software such as VMS or video analytics software. Access the color map via URL `rtsp://IP` or physical port `8554/thermal`. Do not forget to choose the option “RTSP out” to direct the video stream via the RTSP protocol through the RJ45 port.

Please download the color map from the link below:

[The color map file of body temperature camera](#)

Recommendation for deployment

Refer to below recommendations for best accuracy results:

