



# **THERMAL<sup>TM</sup> RADAR**

***Visionary Thermal Detection***

**Thermal Radar Walk Test:**

# Walk Test:

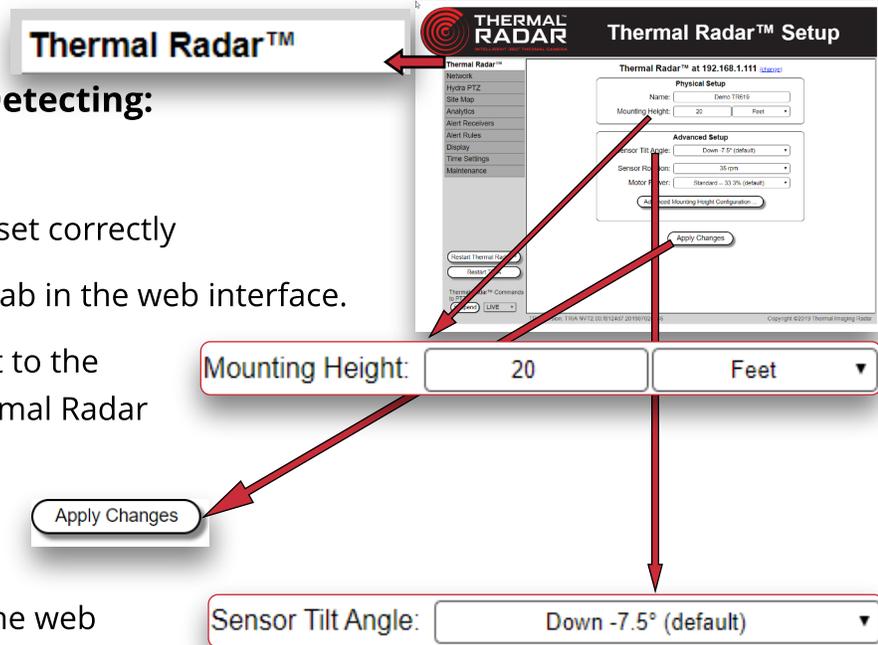
After the TRIA has been configured, it is best practice to perform a "Walk Test" to determine if the Thermal Radar is detecting and tracking accurately. To perform a walk test, have another individual or yourself walk the site where the Hydra/Thermal Radar is installed. Ensure the individual is walking through the areas the AOI's have been programmed.

Here are the steps to follow while performing the walk test:

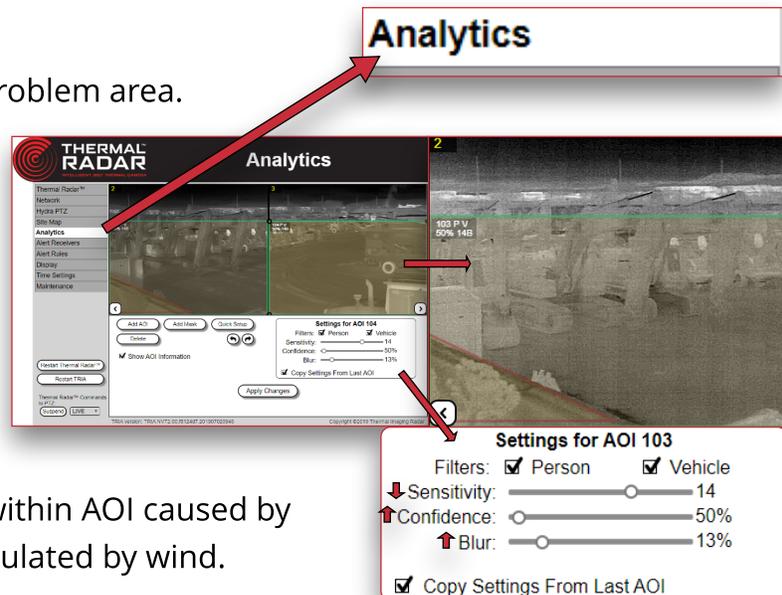
## Step A: Verify the Thermal Radar is Detecting:

If not detecting anything then:

1. Ensure the Thermal Radar height is set correctly
  - i. Go to the thermal radar tab in the web interface.
  - ii. ensure mounting height is set to the distance from the top of Thermal Radar unit to the ground.
  - iii. ensure to click "apply changes" to save prior to moving to any other part of the web interface.
2. Ensure the Thermal Radar Tilt Angle is set correctly
  - Also found in the thermal radar tab will be the sensor tilt angle. By default, tilt should be set to  $-7.5^\circ$  which is where it should be set with few rare exceptions.
3. Make sure an AOI is added into detection area from the Analytics tab.
  - Verify AOI Settings are correct given the installation.



- If excessive false detections:
  1. Decrease AOI sensitivity for problem area.
  2. Increase AOI confidence, this will decrease probability of the Thermal Radar triggering false detections outside of the parameters of the filters.
  3. Increase AOI Blur to ensure ignorance of detections caused by repetitive motion within AOI caused by plants or other objects manipulated by wind.



## Step B: Verify and Adjust PTZ Alignment and Desired Movement Frequency

*\*Make adjustments under "Hydra PTZ" tab*

### 1. Pan Offset Adjustment:

a. If the PTZ needs to point more Right then add more to the Hydra PTZ "Pan Offset Alignment", if the PTZ needs to point more Left then subtract from the PTZ "Pan Offset Alignment".

### 2. Tilt Adjustment:

a. If the PTZ needs to point more Up then add to the PTZ "Tilt Adjustment", if the PTZ needs to point more Down then subtract from the PTZ "Tilt Adjustment"

### 3. If PTZ moves too often:

◦ Adjust the "PTZ Movement Rules" by adding more "Consecutive Detections" (increment by 1 until desired movement is achieved)

◦ Additionally, the box can be checked to disarm the station where movement was detected and a value can be added for the number of rotations you would like the station to be disarmed (increment by 1 until desired movement is achieved)

a. If the PTZ needs to move more often:

- Decrease the number of "Consecutive Detections"
- Decrease the number of sensor rotations a station will be disarmed
- Turn off the disarming feature
- Adjust AOI sensitivity

The screenshot shows the 'Hydra PTZ Configuration' interface. A sidebar on the left lists menu items: Thermal Radar™, Network, Hydra PTZ (highlighted), Site Map, Analytics, Alert Receivers, Alert Rules, Display, Time Settings, and Maintenance. The main content area is divided into sections: PTZ Camera Settings (PTZ Brand: DigitalWatchd, IP Address: 192.168.1.112, User Name: admin, Password: admin), Hydra PTZ Alignment (Pan Offset Alignment: 228.0 Degrees Clockwise), Tilt and Zoom Adjustment (Tilt Adjustment: 2, Reach Max Zoom at: 250 m, Maximum Zoom Level: Wide to Tight slider, Zoom PTZ during adjustments checked), and PTZ Movement Rules (Move After: 2 Consecutive Detections in an AOI, After Move, Disarm AOI for 0 Rotations Without Detections (1 rotation = 1.7 seconds)).

Callouts highlight the following elements:

- Hydra PTZ Alignment:** Pan Offset Alignment: 228.0 Degrees Clockwise
- Tilt and Zoom Adjustment:** Tilt Adjustment: 2, Reach Max Zoom at: 250 m, Maximum Zoom Level: Wide to Tight, Zoom PTZ during adjustments checked
- PTZ Movement Rules:** Move After 2 Consecutive Detections in an AOI
- Disarming Feature:**  After Move, Disarm AOI for 0 Rotations Without Detections (1 rotation = 1.7 seconds)

## Step C: Verify and Adjust Map North Offset and Scale:

1. Scale:

- If dots on detection on radar map are too close then decrease the "Map Scale".
- If dots are too far then increase the "Map Scale".

2. North Offset:

- If dots need to rotate clockwise then decrease the "North Offset".
- If dots need to rotate counter-clockwise then increase the "North Offset".



## Step D: Verify Alerts are being sent to Alert Receivers (VMS, Relays, etc... )

1. Verify that the logic is programmed into the system receiving the alerts relative to the given VMS in use.

- Ensure the alert format is correct for VMS.
- Verify ip addressing, port, and authentication info for given alert receiver is correct.

2. On the "Alert Rules", Press "Test" button to send signal to chosen active receiver(s) to verify connectivity.

