Feature Update

THERMAL™ RADAR

Visionary Thermal Detection

2.1 Release notes.

Removed Advanced Mounting Height configuration
The Advanced Mounting height configuration interface has been removed and replaced with the Distances Interface.

Mounting Height and Sensor Tilt Angle are Now Configured in the Distances Tab.
These parameters used for distance and object size calculation are now located in the Distances tab.

Distances Interface has been Added.
Several parameters listed above have been consolidated into the Distances interface. This interface allows users to set up the Height, Sensor Down-Tilt, Horizon Distance, as well as configure distance markers to terrain.

New Analytics Features have been Added.
Several parameters have been added to Analytics including "Blackout Masks" , an AOI bypass control, and the ability to show distance markers.

New VMS Integrations Added to Alert Receivers.
The Thermal Radar now supports Immix and Avigilon. Consult support for integration documentation and information.

Detections are now Highlighted in Yellow.
 In the live feed, when the Thermal Radar detects movement, but hasn't converted the movement into an alert, the detection is highlighted yellow. When the detection has converted into an alert, the station will be highlighted in red in the live feed. The same is true of the radar "blips" on the map.

New Display settings.
The display tab now has new settings to control the changes made to the live feed. These include "Highlight Detection Duration", "Show Detections", and "Inverse Image (black hot)".

The New "Distances" Tab
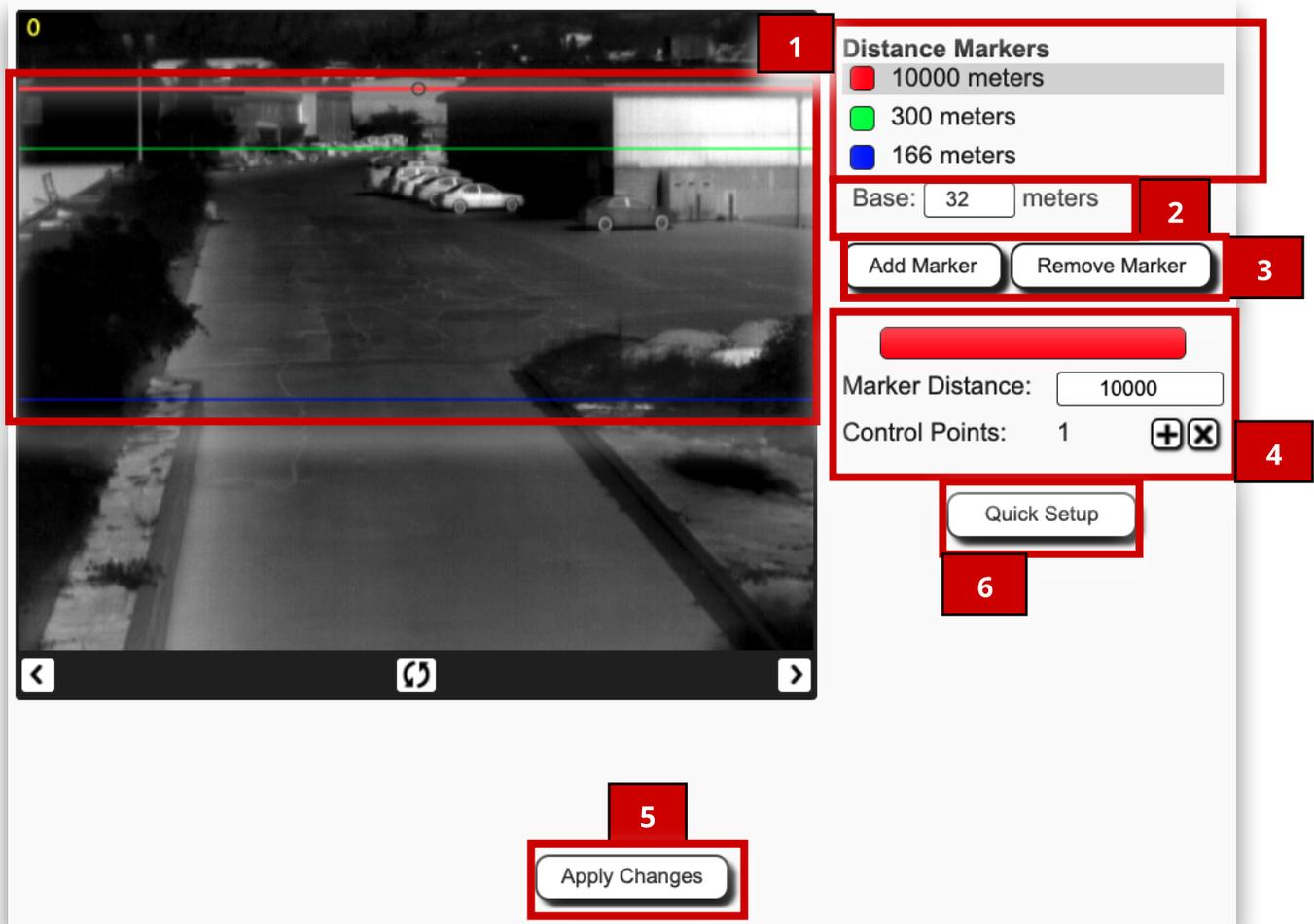
What is the Distances Tab?

The way the Thermal Radar calculates the distance of an object from the device, and thus the geographic location and size of the object being detected, is based on a series of trigonometric functions. This set of calculations is based off of the assumption that the plane on which the Thermal Radar sits is perfectly parallel to the also perfectly flat ground. This has been found to almost never be the case in real world scenarios and thus we've added the "Distances" interface to compensate.

The Distances interface allows the user to configure visually how far away objects are, as well as set the horizon, to allow the thermal radar to account for variances in terrain.

Basic Distances Setup

Distance Tab Functions

1   **Distance Markers** - The distance markers are used to tell the thermal radar the distance of objects in the field of view. The top red marker is used to determine the "horizon" distance. The thermal radar will not detect anything beyond the horizon. You can adjust the position of each of the distance markers by clicking and holding on the "control point" and dragging the control point up or down to its desired location.

2   **Base** - The Base value is the distance from the bottom of the thermal radar's pole to the bottom of the thermal radar's field of view. The Base is often referred to as the "blind spot" as the Thermal Radar is not able to the area beneath it outside of its field of view.

3   **Add and Remove Marker Buttons** - The Add/Remove button can be used to add/remove distance markers in the image. The buttons will only add or remove a distance marker to/from the station you are working on.

4 **Distance Marker Parameters** - The displayed color corresponds to the distance marker that is being adjusted. The marker distance is the geographic distance the Thermal Radar is from the selected distance line. "Control Points" shows the number of control points on the selected marker. Use the ⊞ and ⊠ buttons to add or remove control points from the marker.

5 **Apply Changes** - Use the Apply button to save any changes made to the Distances tab settings. Do not click off the page without pressing "Apply Changes" or you will lose all changes made.

Distances Quick Setup

a	Number of Distance Markers:	3
b	Number of Control Points:	1
c	Horizon Distance (meters):	10000
d	Thermal Radar Height (meters):	10
e	Tilt Angle (negative is down):	-7.5

Stations:

f   00 01 02 03 04 05 06 07

08 09 10 11 12 13 14 ALL

OK   Cancel

6 **Quick Setup** - The Quick Setup button will open the Distances Quick Setup menu. Using Quick Setup can save a great deal of time when setting up a new unit and may be the only adjustment necessary when there is little to no terrain. You are able to set the parameters to all distance markers on all selected stations at once or use it to clear all distance marker adjustments made.

   a. Sets the number of distance markers per station.
   b. Sets the number of control points for each distance marker.
   c. Sets the distance of the Horizon (top distance marker).
   d. Sets the Height of the Thermal Radar. This is the distance between the sensor (top of unit) to the ground it sits on. The system uses this as the basis of which it calculates distance and object size.
   e. Sets the Sensor tilt angle. The sensor is by default set tilted downward at an angle of -7.5º and that is the value that is recommended for most installations.
   f. Determines what stations will receive the Quick Setup changes. The red stations receive the changes and white stations will be exempt from adjustments made. The "ALL" button will select or deselect all stations at once.