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TV2 Alarm Behavior,

The alarm is triggered only once the measurement, humidity or differential pressure has moved outside the 'safe' zone for the set period of time, as defined by the user in the alarm setup menu for each sensor. The clock that controls the alarm is different than the one that controls the logging of data. You could get an alarm and see an 'A' and 'a' on the chart display but you may not see a high temperature recorded on the chart if the data store rate is less frequent than the alarm interval.
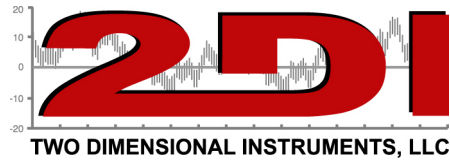
For example: If you are storing a temperature every 10 minutes but have the alarm set to go off if the temperature rises above 50° for more than 1 minute*, you may not see a temperature above 50° on the chart if the temperature quickly rose above 50° and then rapidly dropped back down below 50°. In this example the temperature you are logging every 10 minutes is an average of all the temperatures collected during that 10-minute time frame and if the temperature were above 50° for only a few seconds it would be averaged in with all of the other lower temperatures taken during the 10 minute period.*

Once triggered, the alarm will continue until one of the following conditions occurs:

1) A new measurement is taken that is within the safe parameters. At this point, the alarm timer resets so that the alarm condition must be violated for the amount of time specified in the alarm menu again before the alarm is triggered again. Note that even a single measurement that is taken once the alarm temperature is violated will cause a timer reset. So for example, if an alarm condition is set to go off when the temperature rises above 35 degrees for 30 minutes, and the TV2 has observed temperatures above 35 for 29 minutes, it will only take a single good sample for the timer to reset to 0. So if the TV2 sees 29 minutes of samples above 35 degrees followed by a single sample 35 degrees or less, and this cycle repeats indefinitely, the alarm will never be triggered.

2) The user pressed the ESC key. At this point, the relay is opened, and the alarm timer is reset. So for example, assume that an alarm condition is again to trigger when the temperature rises above 35 degrees for 30 minutes. The temperature is above 35 degrees for 30 minutes and the relay is closed. The user silences the alarm by pressing the ESC button, and the timer is reset to 30 minutes. If the temperature remains above 35 degrees for another 30 minutes, the alarm will be triggered again.

3) The alarm trigger timer expires. Once again, assume that an alarm condition is again to trigger when the temperature rises above 35 degrees for 30 minutes. The relay is set in the alarm setup menu to close for 15 minutes. The ThermaViewer sees higher than 35 degrees for 30 minutes, and this triggers an alarm. During this time, the temperature never drops back below 35 degrees, and the alarm will continue to sound. After 10 minutes, the alarm trigger timer expires, the relay will open, and the alarm timer will be reset. It will then be another 30 minutes before the alarm triggers again.

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- It is recommended that you do not set the alarm temperature delay time for a shorter interval less than the store data time. If you are storing a temperature every 10 minutes you should set your alarm delay time for at least 10 minutes. That way if you get an alarm you can use the trace mode on the chart display to see what the temperature rose to and how long it stayed there when the alarm went off.

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* Note: Do not set the alarm time to 0:00 it will not ever go off.