

DCV 751 Installation tips

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Warning:

The information contained in this document are field testing results. These results might vary depending on the site, weather conditions, installation, radio environment etc. However these results can be used as an average model for the DCV751 functioning

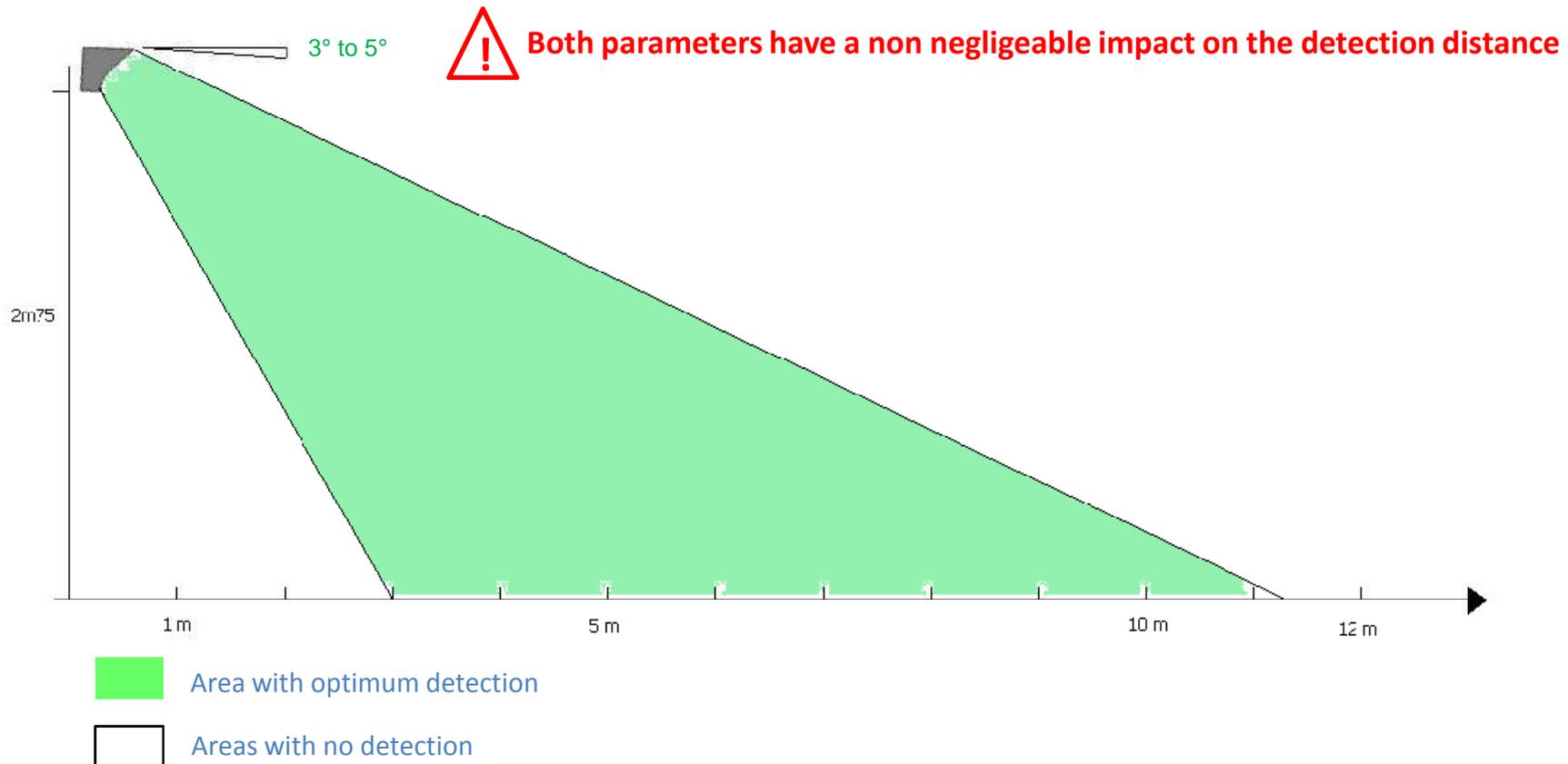
Optimum installation height and tilt angle

Optimum mounting height: 2m75

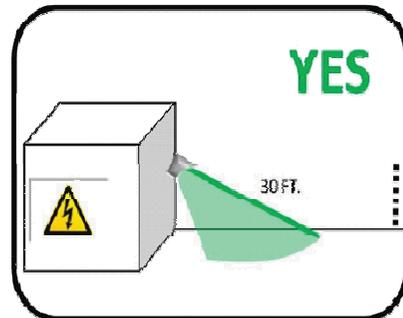
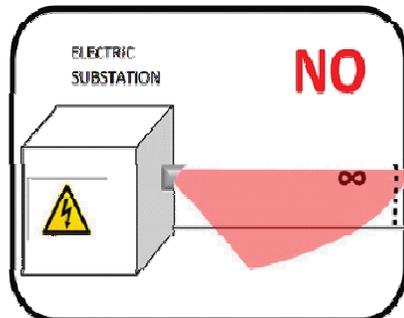
The installation height has an impact on the sensitivity of the DCV751. A MotionViewer placed higher will be less sensitive than normal and a MotionViewer placed lower will be more sensitive (the installation height should always be between 2m50 and 3m).

Optimum tilt angle: ~5°

It is important to terminate the view of a MotionViewer, to avoid detections further than the protected area (and consequent false alarms). The tilt for an installation at 2m60 should be 5°, it can be adjusted for different heights.

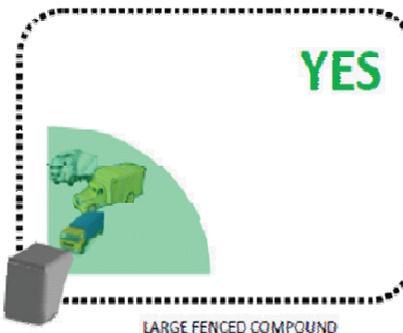


Installation tips



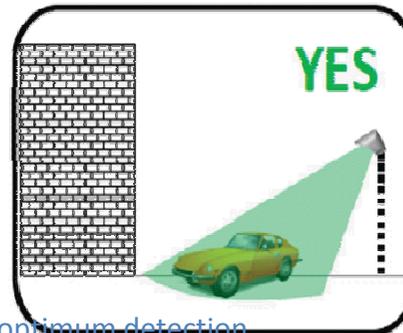
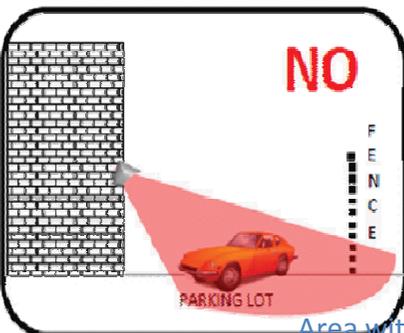
Terminate the view of MotionViewer

Installing the outdoor MotionViewer so that the top line of sight looks into infinity, it will most likely result in something or someone, tripping the PIR while the digital video camera is out of range to record what tripped the PIR. Make sure to tilt the MotionViewer down around 5 degrees so that its top line of sight terminates into the ground. Taking into account all three elements of the MotionViewer; the PIR, digital video camera, and infrared illuminators— you should aim to terminate the view of the MotionViewer 10m from the device.



Protects assets and access points, not area

This diagram simply illustrates that Outdoor MotionViewer should be used to secure specific assets or clusters of assets rather than cover a large area where the range of the MotionViewer might extend beyond a fence and unnecessarily detect irrelevant objects, animals or persons.



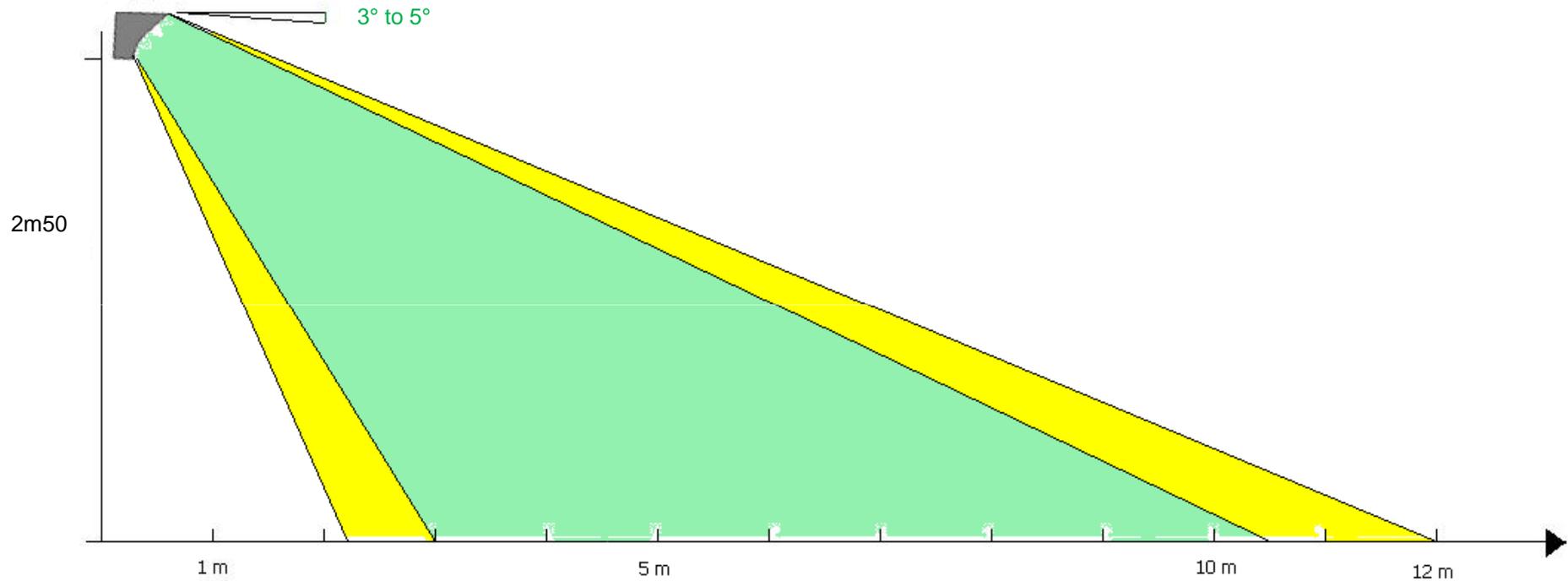
Place MotionViewer looking from out to in, not in to out

If no fence is securing a given parking lot then the application of our Outdoor MotionViewer is most likely inappropriate. Because Videofied is an intrusion-based, video-alarm system it should be used in places and during times where and when no person should be while the system is armed. An unsecured parking lot (at a shopping mall for example) would most likely require a surveillance solution, not Videofied. Looking out-to-in as opposed to in-to-out avoids the possibility that our MotionViewer will be tripped by someone walking their dog along the fence, for example.

Area with optimum detection

Installation height influence

Installation height 2,5m and tilt angle 3° to 5°



-  Area with optimum detection
-  Areas with no detection
-  Areas with poor detection

CONCLUSIONS

When reducing the installation height from 2m75 to 2m50 we observed the following:

- The optimum detection range drops to 3m00 to 10m40.
- The blind zone underneath the detector is slightly decreased with an area between 2m20 and 3m00 where we observe a 40% successful detection rate.

When increasing the installation height from 2m75 to 3m00 you should get the following:

- 5% to 10% increase of the maximum detection distance (making it average maximum 12m00 instead of 11m20)
- 25% to 30% increase of the blind zone (making it average 3m80-4m00 instead of 3m00)



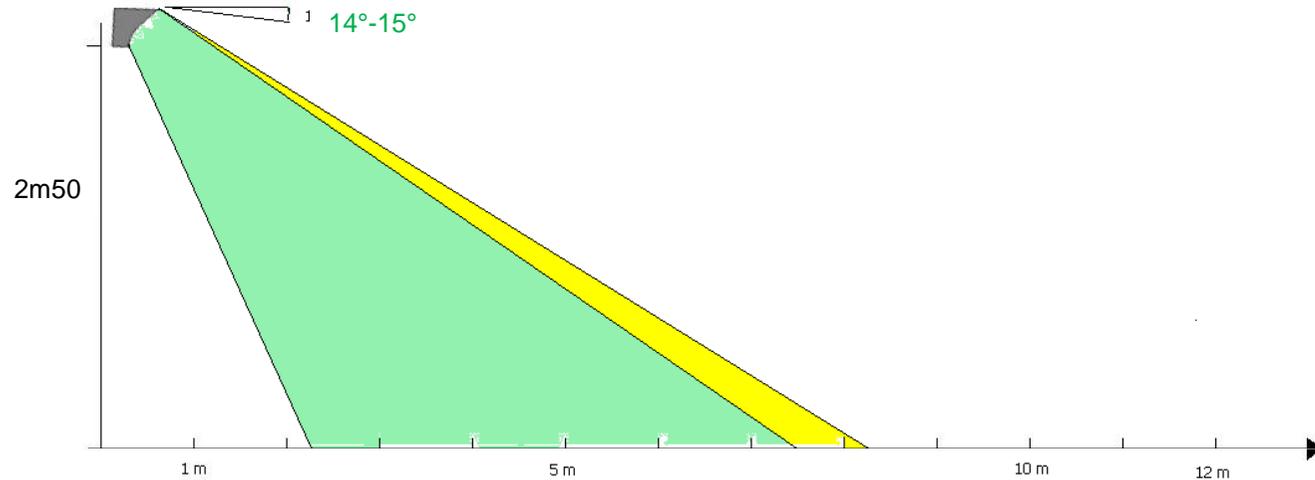
The detection of the DCV751 is calibrated for a human being therefore it is important to respect the installation height of 2m50 to 3m00.

Installed lower than 2m50 the DCV751 will generate a lot of false alarms (pet triggered or similar) and the detection distance will decrease considerably.

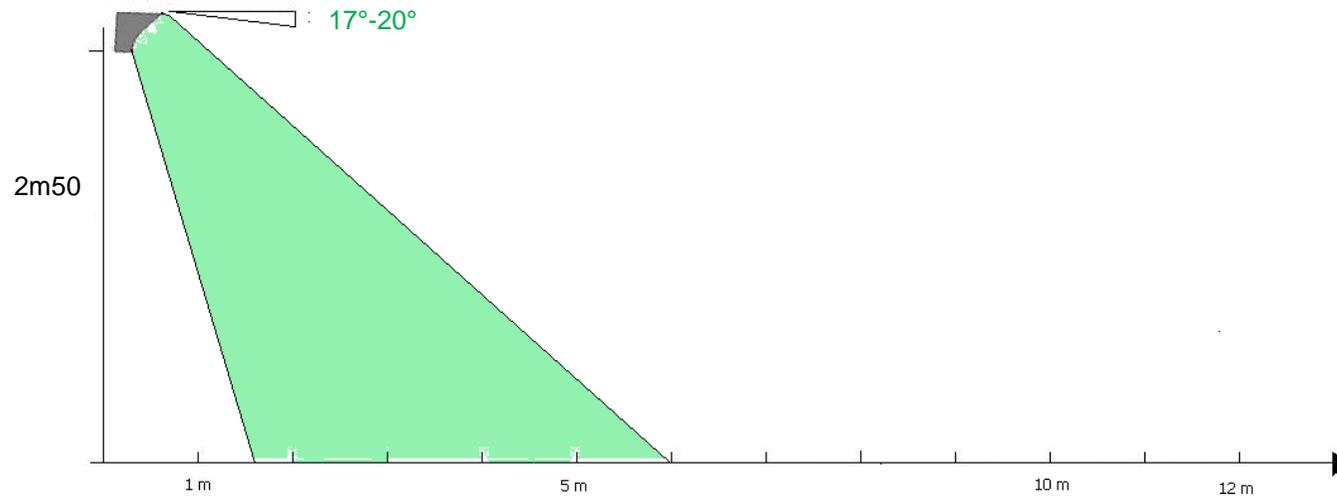
Installed higher than 3m00 the DCV751 there is a high risk of reducing the sensitivity to the point where the detection of a human being is very poor and the blind zone increases to 5-6 meters.

Installation tilt angle influence

Installation height 2,5m and tilt angle 14°-15°



Installation height 2,5m and tilt angle 17°-20°



CONCLUSIONS

When increasing the installation tilt angle from 5° to 14° we observed the following:

- The maximum detection distance drops to 7m40 (instead of 11m20)
- The blind zone underneath the detector has slightly decreased to 2m20 (instead of 3m00)

When increasing the installation tilt angle from 5° to 18° we observed the following:

- The maximum detection distance drops to 6m00 (instead of 11m20)
- The blind zone underneath the detector has slightly decreased to 1m60 (instead of 3m00)



When looking at a DCV751 tilted down of 14° or 18° it does not look like much. However you in the view of the above it is clear that the tilt angle has a huge impact on the detection distance and therefore should be controlled carefully.

However it is a good solution to focus on a specific good/asset and reduce the blind zone underneath the detector.

DCV751 Sensitivity adjustment

Each time you configure a DCV751, you give it a name.

The sensitivity of the DCV751 can be adjusted by adding one of the following parameters at the end of the name of the camera:

- \$1 to reduce DCV751 sensitivity
- \$2 to reduce strongly DCV751 sensitivity (you have to be careful with the maximum detection distance)
- \$8 to increase DCV751 sensitivity
- \$9 to increase strongly DCV751 sensitivity (you have to be careful with false alarms).

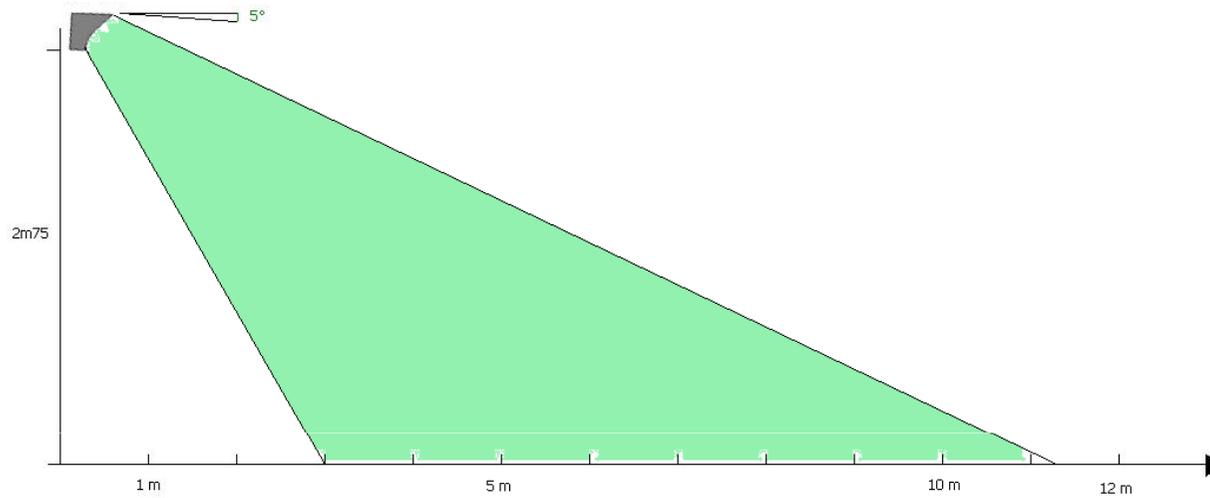
Example : The name given is « CAMERA OUTDOOR1 ».

If I change the name to « CAMERA OUTDOOR1\$8 », it will increase the sensitivity of the DCV751

NB: The sensitivity adjustment is available on the outdoor MotionViewers with references DCV751V or DCV751PV.

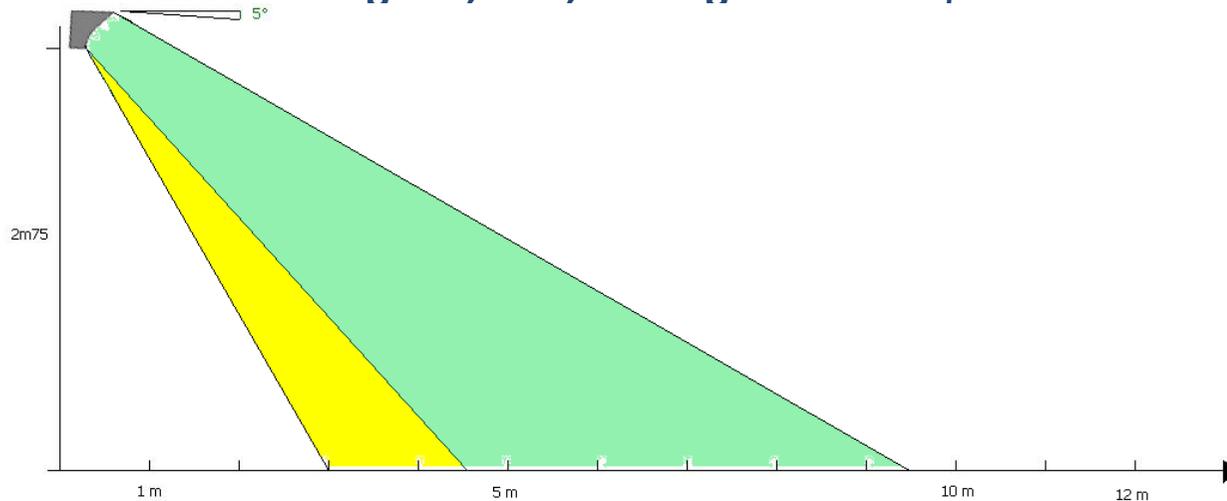
Installation tilt angle influence

Installation height 2,75m, tilt angle $\sim 5^\circ$ and \$0 (default)



-  Area with optimum detection
-  Areas with no detection
-  Areas with poor detection

Installation height 2,75m, tilt angle $\sim 5^\circ$ and \$2



CONCLUSIONS

When decreasing the sensitivity level to \$2 we observed the following:

- The maximum detection distance drops to 9m50 (instead of 11m20)
- The blind zone underneath the detector has increased to 4m50 (instead of 3m00)

When increasing the sensitivity level to \$9 you should get the following:

- The maximum detection distance can increase by 10% to 15%
- The blind zone can slightly decrease (from 3m00 to 2m50-2m00)



**The sensitivity level can be used to adjust the detection range of a DCV751
\$1 or \$2 can be used to limit the number of false alarms, but only for very focused and limited
distances applications.**

**\$8 and \$9 can be used to increase the sensitivity of the DCV, but these are to be used only in
environments where the false alarm rate is low (fenced, no wild life or plants etc.)**