Correct Detection of Movement

Attention!
The TOWER-20 AM, TOWER-20 AM MCW, TOWER-20 AM PG2 and TOWER CAM PG2 are designed to detect the motion of a human intruder that crosses through at least 2 adjacent detection zones out of the 8 detection zones in the coverage area – see figure 1.

For example: Crossing detection zones 5 & 4 or 7 & 6 etc. For this reason, the detector must be installed so that the expected motion pattern of an intruder would cross at least two adjacent detection zones of the detector.

1 Balcony – NOT OK
The detectors are not designed to protect narrow areas such as a corridor, narrow balcony or passage.
In example 1, the far end of the balcony is not covered adequately by the two detection zones 1 & 2 so that movement at that location may not be detected.

2 Terrace - OK
In example 2, the direction of movement is excellent for effective detection since 2 zones (zones 4 and 5) are crossed.

3 Yard – NOT OK
In Example 3 the person is not detected since the pattern of motion does not cross two adjacent detection zones.

4 Yard – OK
In example 4, the person is detected since the pattern of motion crosses two adjacent detection zones 6 and 7.
Protecting the House and Yard

1 - OK
Example 1 illustrates optimal installation. The detector does not "look" into the neighbor's premises or street where people or vehicles may move and be detected.

2 - NOT OK
Example 2 illustrates poor installation. The detector "looks" into the neighbor's premises and into the street and may detect objects moving outside of the protected area. However, measures can be taken so that the detector does not "look" outside the protected area. For example, installing the detector opposite a high wall instead of opposite a low fence ensures correct installation.

3 4
The motion of a person walking outside of the desired protected area may be detected and cause an unwanted or false alarm.

Figure 2 – House and Yard Protection
Note: The detector is designed and tested for a range of 12 m; however in an outdoor environment the target range can be greater. It is highly recommended to limit the field of view by using for example a wall, house or fence.

**Figure 3** – Installation location

Note: To decrease false alarms that can be triggered by pets; install the detector at a height between 2 and 2.5 meters from the ground surface. In addition, fix the vertical adjustment to position #4 or #5 on the detector. Direct the detector on a background such as a wall, house or fence but not pointing at an open space.

**Figure 4** – Installation location for pet immunity
Correct Adjustment of Detector When Installed on Flat and Sloped Surfaces

For optimum performance, the detector must be vertically adjusted so that the upper "detection beams" are directed toward the upper part of a person moving at the far end of the protected area. The adjustment process and a reference vertical adjustment table are provided in the Installation Instructions. This table is suitable when the detector is mounted on a straight vertical wall perpendicular to a horizontally flat ground only. However, the ground surface may have some inclines which require some corrections to the vertical adjustment of the detector.

Correct Installation
Upper beams directed towards the upper part of the moving person

Flat ground
Adjust the detector according to the vertical adjustment scale; see the Vertical Adjustment table in the Installation Instructions for details.

Downward sloped ground
On downward sloped surfaces, you may need to compensate for the slope by adding 1 or more steps to the numbers provided in the Vertical Adjustment Reference table in the Installation Instructions.

Upward sloped ground
On upward sloped surfaces, you may need to compensate for the slope by deducting 1 or more steps from the numbers provided in the Vertical Adjustment Reference table in the Installation Instructions.

Bracket Mounting
When mounting the bracket, the bracket must be positioned so that it runs parallel to the ground surface, see the following examples.

In both examples, the detector is mounted parallel to the ground surface.