## Telescopic Sight AD 851

## Detector Alignment Guidelines

The detection range of a PIR detector is not limited but a function of size, speed and temperature contrast of a target against its background. The detector should be aligned so that a natural or artificial background at the end of the range terminates the field of view. Where the detection range has to be limited, a terminating screen can be used to avoid detection of targets beyond the wanted range.
Vertical alignment is optimal when the upper edge of the field of view is at 1.5 to 2.5 m above ground at the end of the required detection range provided that the field of view is properly terminated.
Coarse alignment can be done visually by looking along the grove on top of the detector. Accurate fine alignment is easily achieved with the help of the Universal Telescopic Sight AD 851, which can be placed on top of the detector for this purpose.


The AD 851 fits all detector models and should be used for fine alignment.
The graticule of the AD 851 corresponds to the axis of the detector. The upper edge of the detection curtain in the vertical plane in respect to the axis of the detector varies depending on the model.
The tables below show the elevation ( $Z$ ) of the upper edge of the detection curtain from the axis and the total width $(\mathrm{Y})$ of the detection curtain as a function of the actual distance from the detector.

Models With Upper Edge Corresponding to Axis
PRO 45 / PRO 45H

| Distance $\mathbf{X}$ | Total width $\mathbf{Y}$ | Elevation $\mathbf{Z}$ |
| :---: | :---: | :---: |
| 20 m | 1.3 m | 0 m |
| 30 m | 2.0 m | 0 m |
| 40 m | 2.6 m | 0 m |
| 50 m | 3.3 m | 0 m |
| 60 m | 3.9 m | 0 m |



PRO 45H only


PRO 45D / PRO 45DH

| Distance $\mathbf{X}$ | Total width $\mathbf{Y}$ | Elevation $\mathbf{Z}$ |
| :---: | :---: | :---: |
| 20 m | 1.4 m | 0 m |
| 30 m | 2.1 m | 0 m |
| 40 m | 2.9 m | 0 m |
| 50 m | 3.6 m | 0 m |
| 60 m | 4.2 m | 0 m |

## Models With Upper Edge Off-Axis

PRO 75A

| Distance $\mathbf{X}$ | Total width $\mathbf{Y}$ | Elevation $\mathbf{Z}$ |
| :---: | :---: | :---: |
| 20 m | 0.7 m | 0.3 m |
| 40 m | 1.3 m | 0.5 m |
| 60 m | 2.0 m | 0.8 m |
| 80 m | 2.6 m | 1.0 m |
| 100 m | 3.3 m | 1.3 m |



PRO 150D \& PRO 250A

| Distance X | Total width $\mathbf{Y}$ | Elevation $\mathbf{Z}$ |
| :---: | :---: | :---: |
| 25 m | 0.6 m | 0.5 m |
| 50 m | 1.3 m | 1.0 m |
| 75 m | 1.9 m | 1.5 m |
| 100 m | 2.5 m | 2.0 m |
| 125 m | 3.1 m | 2.5 m |
| 150 m | 3.7 m | 3.0 m |



## PRO 100 / PRO 100H

| Distance $\mathbf{X}$ | Total width $\mathbf{Y}$ | Elevation $\mathbf{Z}$ |
| :---: | :---: | :---: |
| 20 m | 0.4 m | 0.5 m |
| 40 m | 0.9 m | 1.0 m |
| 60 m | 1.4 m | 1.5 m |
| 80 m | 1.8 m | 2.0 m |
| 100 m | 2.2 m | 2.5 m |
| 120 m | 2.7 m | 3.0 m |
| 150 m | 3.3 m | 3.7 m |

PRO 100H only

