

Panasonic

Grid-EYE People Counting Software Manual

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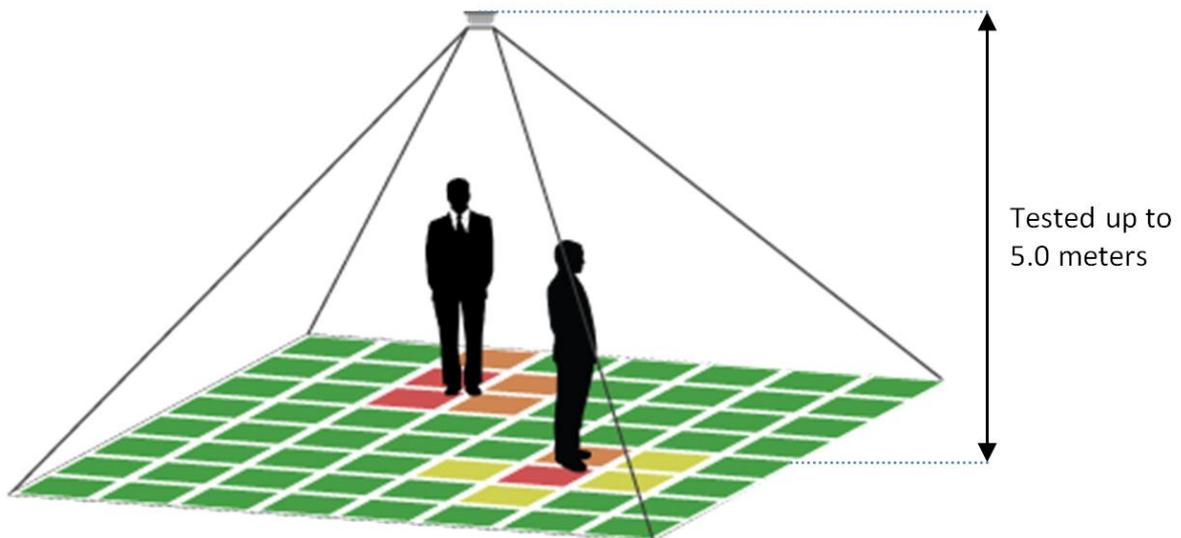
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Introduction

This user manual is aimed at giving the customers an overview of the installation of the Grid-EYE People Counting software, the needed usb driver and the handling of this software for tracking and counting people. The software can be used with the Grid-EYE Evaluation Kit with both generations of the Grid-EYE sensor. There is an option in the software where the used sensor can be chosen. A special Firmware for the evaluation kit is **not** needed.

Mounting the Evaluation Board

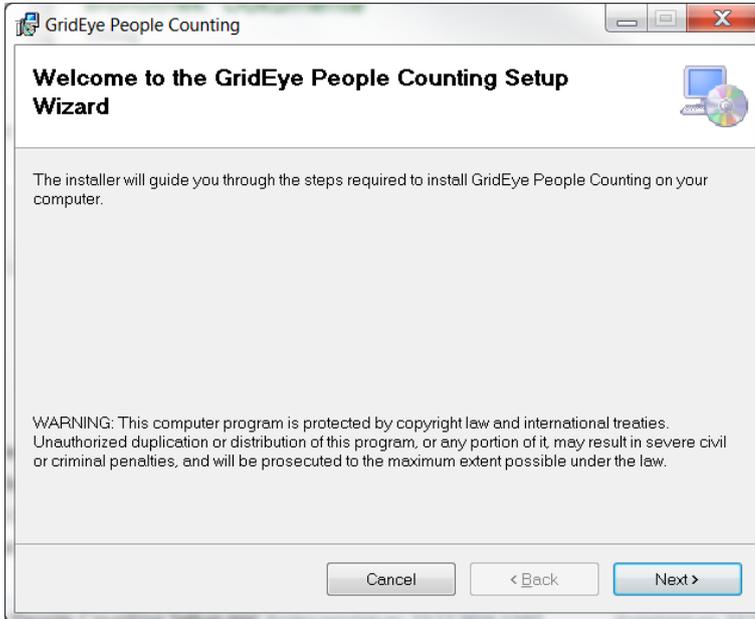
For this demonstration the evaluation board must be mounted in a way that the sensor is looking from above on the persons. It was tested with a mounting height up to 5 meters. This is not the limit of the algorithm. The maximum mounting Height is influenced by the filter and threshold setup. This Setup is fixed in this software.



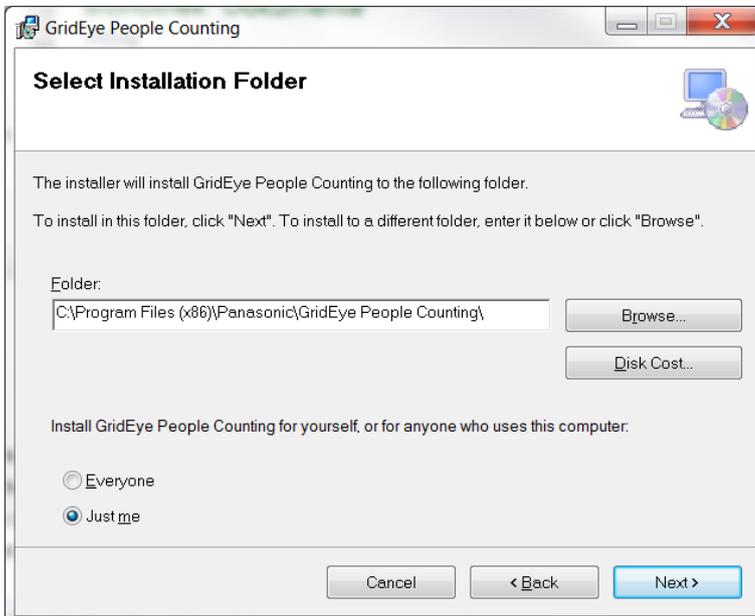
Software Installation

Please follow these steps for the installation of the software.

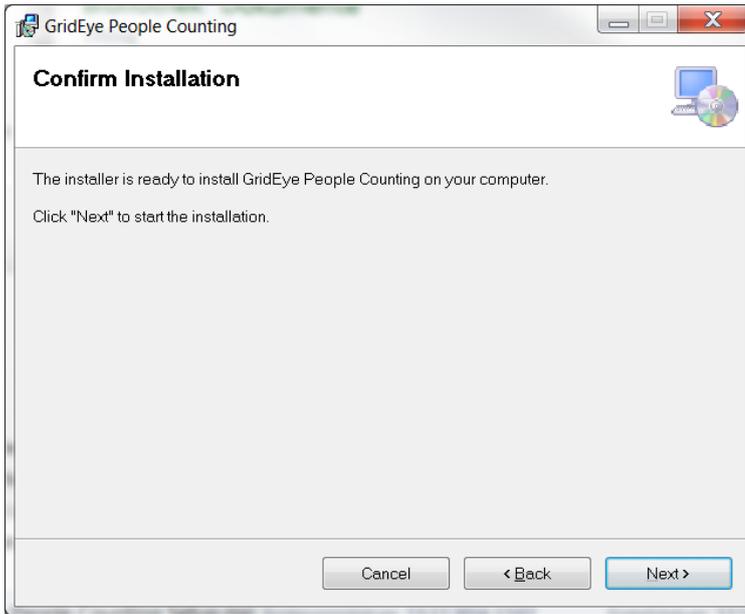
1. Double click the Installation file.
2. Click on next.



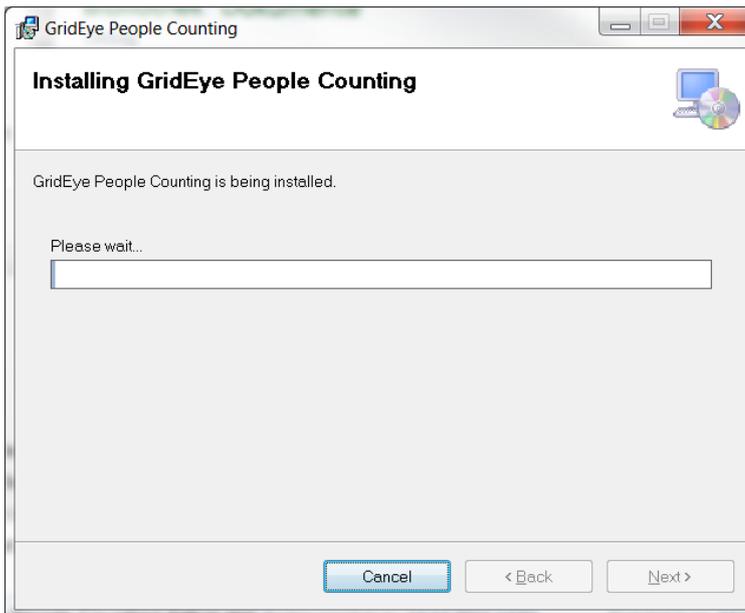
3. Choose the installation folder.



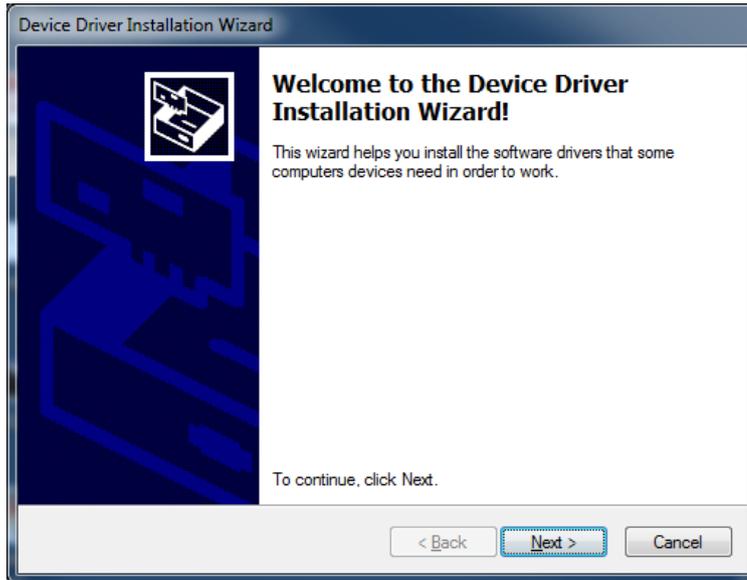
4. Click on next.



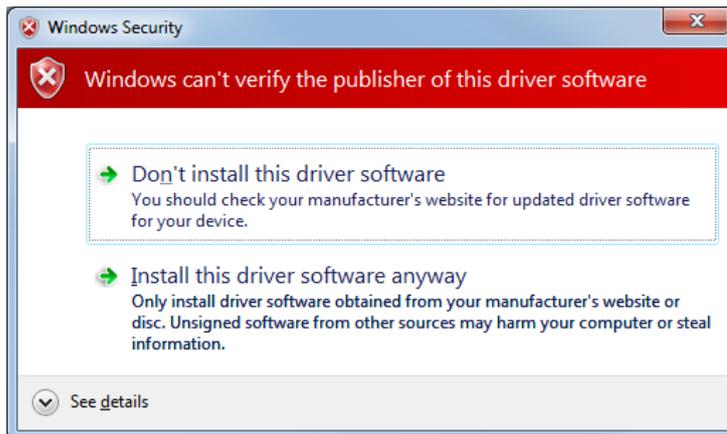
5. Wait until the installation of the software is finished.



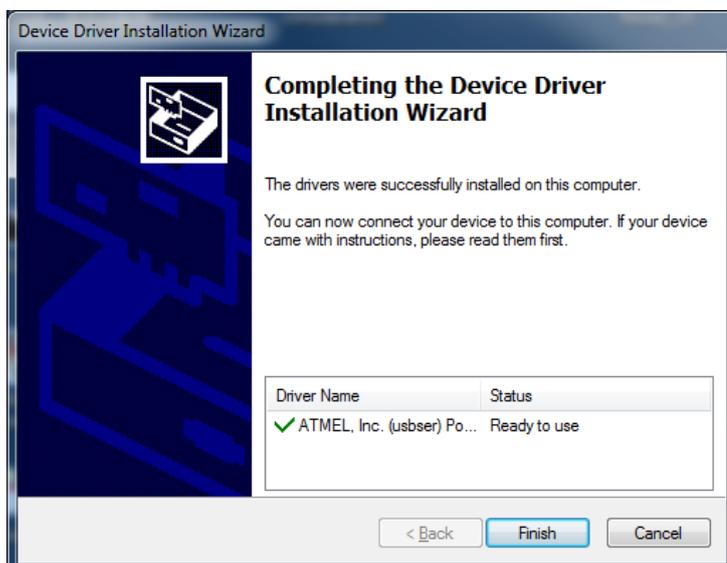
6. After this procedure the usb driver installation part will start automatically. Click on next.

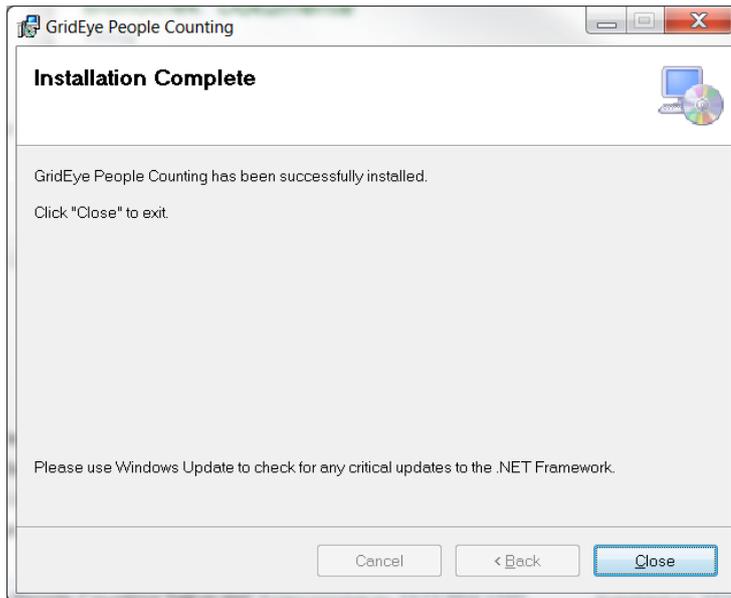


7. The Driver is an unsigned driver. Because of this security information will be displayed. Please **click on Install this driver anyway**.



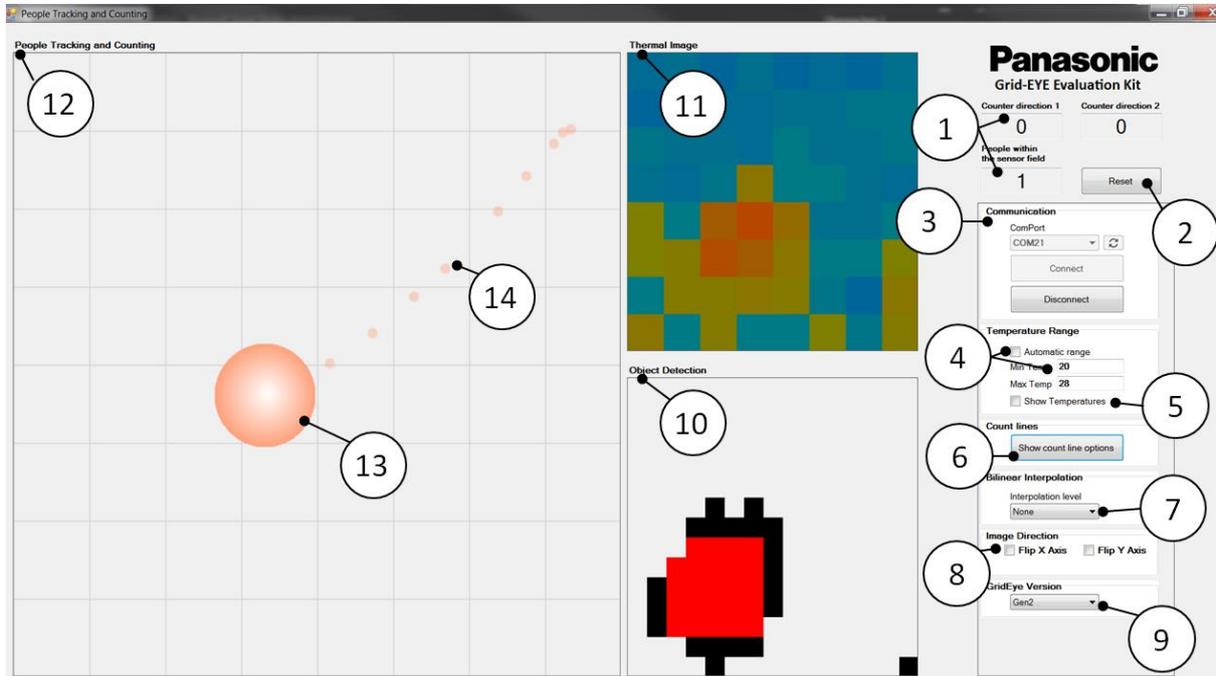
8. After the driver installation click on finish and close on the installation windows.





Software Handling

Main window

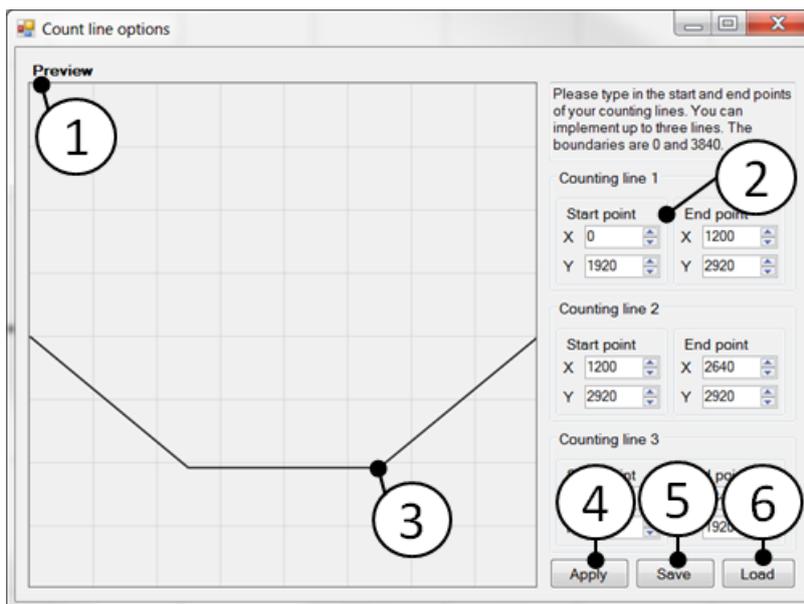


Legend:

1. Counter values and the number of persons within the sensor field.
2. The reset button will reset the whole algorithm.
3. In the communication area the com port of your Grid-EYE Evaluation Board has to be chosen. The com ports can also be connected, disconnected and refreshed.
4. In the temperature range field can be set the boundary temperatures for calculating the colors of the thermal image. If the automatic range field is checked in, it will automatically choose the minimum and maximum temperatures and will display it in the min and max temp fields.
5. If the show temperatures field is checked in, the pixel temperatures will be displayed in the thermal image.
6. The count line option gives the possibility to setup lines in the people count image. If a person cross that line, the counter values will increase according to which direction the line is crossed.
7. With the interpolation level options the thermal image can be interpolated. It is possible to create interpolated thermal images with a resolution of 15 x 15, 29 x 29, 57 x 57, 113 x 113 and 225 x 225 pixels.
8. Gives the option to flip the images. Changing these fields leads to a reset of the people counting algorithms.
9. The Software can be used for both generations of the Grid-EYE sensor. Please note that the performance of the software is better with the generation 2 Grid-EYE sensor.
10. The object detection image gives information about detected objects. Black pixels are object pixels. Red pixel areas are indicating a detected person.

11. The thermal image is the result of the filtered raw data of the Grid-EYE sensor.
12. The people tracking and counting window shows the results of the tracking and counting algorithms in form of a bubble for each detected person.
13. The Bubbles are detected persons.
14. The smaller bubbles show the tracked motion history.

Count line option window



1. The Preview Image shows a preview for the actual counting line setup.
2. A counting line has a start point and an end point. Both are described by an x coordinate and a y coordinate. The boundaries for the coordinates are 0 and 3840. Up to three counting lines can be used.
3. The previewed counting line.
4. Pressing the apply button will transfer the chosen counting line options to the main window. This option will be saved and if the application is closed and then reopened the last chosen line option will be used.
5. A line setup can be saved by pressing the save button.
6. A saved line setup can be load by pressing the load button.