

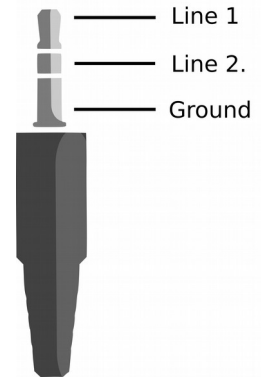
Karmin 3D Stereo Vision Camera



Trigger Port

For stereo vision it is important that the cameras are synchronized, which means that they both acquire a frame at the same point in time. For this purpose, Karmin provides a trigger port at the bottom side of the camera. The trigger port can receive a 3.5 mm stereo phone connector.

The two I/O lines of both camera modules are connected in parallel to the pins of this port. For pin assignment please refer to the illustration on the right.



Usage with the SP1

Connect the two camera modules through a powered USB hub with the SP1 stereo vision sensor. Then connect the camera's trigger port to the trigger port of the SP1 with a 3.5 mm audio cable. By default the SP1 will configure both camera modules to use line 1 as trigger source. Hence, please activate trigger signal 0 in the SP1 configuration.

Usage with a PC

Please connect each camera module to a free USB port of the PC. When using Karmin with a PC there are two possible trigger options:

- A signal generator can be connected to the trigger port for providing a trigger pulse on one input line. Please configure the dedicated input line as trigger source for both camera modules.
- One camera can generate the trigger pulse for the respective other camera. For this operation mode, configure a trigger line for one camera module as output and select "Exposure Active" as line format. Then configure the respective other camera to use the same line as trigger source.

For accessing the cameras, please use the Basler Pylon camera API, which can be obtained from: <http://www.baslerweb.com/en/products/software>