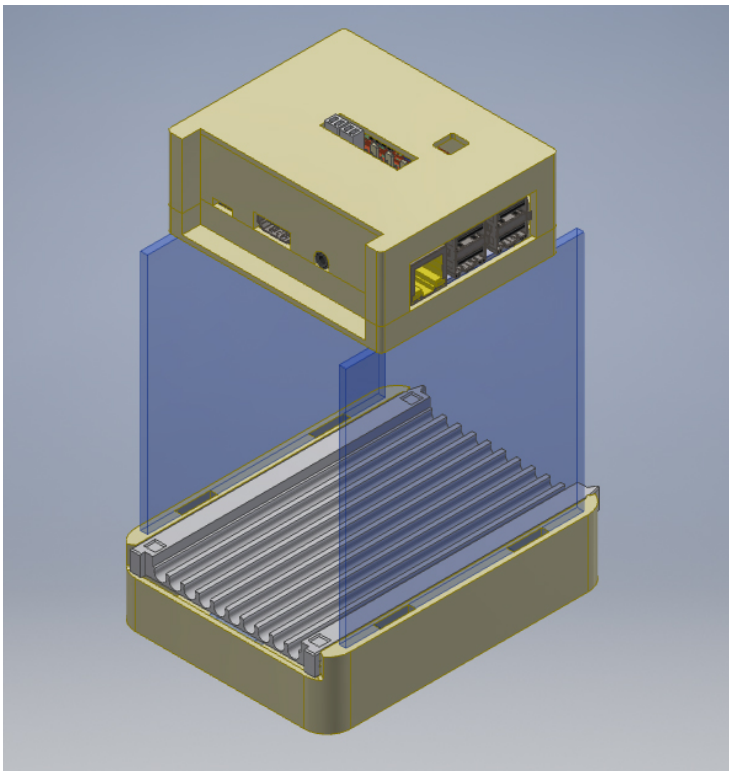
RYMAPT

Ethoscope user manual and documentation



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Chapter 1

Hardware description

The Ethoscope is comprised of the following parts:

Top unit This contains the main components of the Ethoscope, such as the processing unit, the camera and the environmental shield (optional). The components are enclosed in a plastic shell.

Base unit The unit acts as a base for the whole Ethoscope and as a support and alignment tool for the arena. The base unit also contains the strip of Light Emitting Diode (LED) used to provide Infra-red (IR) illumination to the arena.

Arena The arena defines the experiment to be performed. The basic arena, provided with the standard kit, provides support for up to twenty glass tubes, each one defined as a Region Of Interest (ROI). Three black dots in the corner of the arena are used by the software to determine a spatial system of reference.

Side walls The walls connect the base to the top unit and ensure a correct distance between camera and arena. The standard walls are made of 3 mm acrylic sheet.

1.1 Setup

Abbreviations

IR Infra-red. 1

LED Light Emitting Diode. 1

ROI Region Of Interest. 1