

## User Guide – LiDAR Viewer

### Description

The MicroVision LiDAR Viewer offers visualization of streaming sensor data in a 3D point cloud format.

- Enables demonstration of the device imaging capabilities.
- Written in C++ with Qt GUI and VTK 3D visualization libraries.
- C++ source code is provided, to accelerate application-specific customizations.
- A Windows build is provided now with a Linux build provided at a later date.
- Makes use of the MicroVision C/C++ SDK that interfaces to the LiDAR sensor via USB Video Class (UVC). (A MicroVision adapter converts the LiDAR module's MIPI CSI interface to the USB interface.)



Example Screen Capture of LiDAR Viewer

### Starting the Viewer

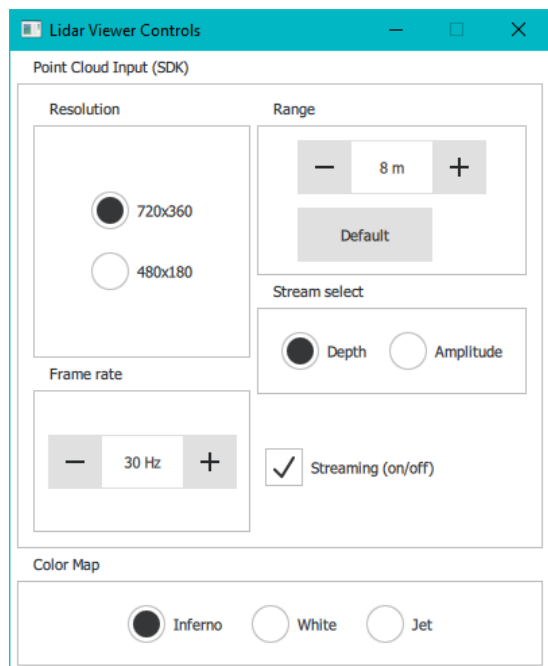
Navigate to the MV\_Viewer\LiDAR\_Vision\build folder, unzip all files for the latest build .zip file to an empty folder on your PC and run the LiDAR-Viewer executable inside it.

## Controlling the Viewer

The viewer's perspective can be changed via the mouse.

Function	Control Description
Zoom	Mouse wheel zooms in or out
Rotate	Left mouse button click and drag up/down or left/right
Pan	Middle mouse button click and drag up/down or left/right

## User Controls



Some viewer settings can be changed by the floating dialog box that is displayed alongside it. The actual dialog box may be slightly different from what's shown.

Control	Function	Description
Resolution	Frame resolution	Selects the frame resolution of the sensor output stream
Range	Depth Scale adjustment	Sets the application display range. Does not affect sensor configuration.
Default	Restore defaults	Restores the default Range and 3D view orientation
Streaming on/off	Sensor data control	Starts or stops device streaming
Color Map	Color map selection	Selects the color scheme of the point cloud view
Frame Rate	Not enabled yet (grayed out)	

## Driver Installation

On Windows 10, typically no additional driver installation is necessary. If necessary, install the driver bundled with the Quad Viewer application.