**Amsterdam University
of Applied Sciences**

Rover Rescue System

Manual - Application

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1   Introduction

The application is used to view the video stream of the robot and control the dual axis camera mounted on the robot. In this document we will go over how to install the application on a phone and how to use the app to connect to the robot.

2   Requirements

In order to install and use the Android app your device will need to have the following specifications:

- Android 6.X.X. or higher;

- Support for OpenGL 2.0 at minimum.

- Gyroscope built-in;

- Minimum screen size of 4.0";

- Maximum screen size of 5.3";

We will recommend a high-tier smartphone for the best experience as they tend to have to best screen quality. Another requirement is to have a Google Cardboard, other options are available but we don't support and recommend them.

3   Installation

To install the application you will first need to enable app installation from unknown sources. Where these settings are located may vary per device and different Android versions.

After enabling installation from unknown sources you need to download the APK-file onto your device. The easiest way of doing this is by going to the latest release page of the app, click here. An alternative would be by downloading the APK on your computer and to transfer it via an USB-cable.

After downloading/transferring the APK-file onto the phone you will need to open it. This can be done via the build in file explorer or a third-party file explorer.

4 Usage

To connect to the robot you will need to be on the same network as the robot. You will also need the IP address of the robot to connect to. When you open the application you will be prompted to insert a server address. After entering the IP address and clicking on the OK button the app will automatically append the default port for the video stream and socket connection.

While the app is configuring everything go ahead and put the phone into the Google Cardboard and put it on your head. By moving your head left, right, up or down the camera will follow your movements.