**PITECH Test Procedure**

During the Demonstration we will demonstrate some steps for Communication, Telecontroller and Detection subsystems. This document covers these steps. We decided to go with video transmission rather than image processing for demonstration. For now, we have 3 systems which are located in different boxes. Smallest box is for transmission of the video, it has a camera on it. The middle size box which has 3 LEDs on, is for command receiving. Moreover, bigger in size box with a screen and antenna on, is for user control and command transmission. Steps for test procedure is as follows:

1. First step is to make sure that Li-po battery’s voltage level is not below 3.7V since it is the critical level for safety reasons. Therefore, terminal voltage of our battery should be above 3.7V.
2. Li-po battery will be connected to camera system which is located in the little box. For safety, we decided not to put battery in default form. User should make the required battery connections. Battery should be connected to blue breadboard inside camera module box. Switch on the box should be off during this procedure.
3. For user control panel Li-po connection to video receiver system should be made. Switch located on the box should be off during this procedure.
4. Power bank connection to Arduino Mega which is inside the middle-sized box with LEDs on it should be made.
5. Power bank connection to Raspberry Pi which is in the bigger box with screen should be made.
6. Switch on small box, power bank activation buttons, if any, and switch on bigger box will be pushed to start demonstration.
7. Screen should have shown something at this step. Also, we should observe fan on the camera module starts working. If nothing happens please check the previous steps.
8. Red, Green and Yellow buttons on bigger box with Screen on it should stay in the same place while the other two boxes should be moved.
9. Pushing these red, green and yellow buttons should activate the LEDs on middle sized box.
10. Button and LED colors are matched. Therefore, true LED should be on while the related button is pushed.
11. Different combination of pushes will be tried during the process.
12. In order to understand full demonstration from one side, two members of the team, which will be assigned later who they are, will move through demonstration place while one member is doing a video call with another member. So, user can see the actions and the output at the same time with the help of video call.
13. At the end all the switches will be off, and Li-po batteries will be disconnected from the system.