

Writing a GUI for the Khepera robot

1 Introduction

Khepera is a miniature mobile robot with a functionality similar to larger robots used in research and education (Fig. 1). Its main features are: two controllable servo motors, eight proximity and ambient light sensors, serial communication, extension turrets such as gripper or camera.

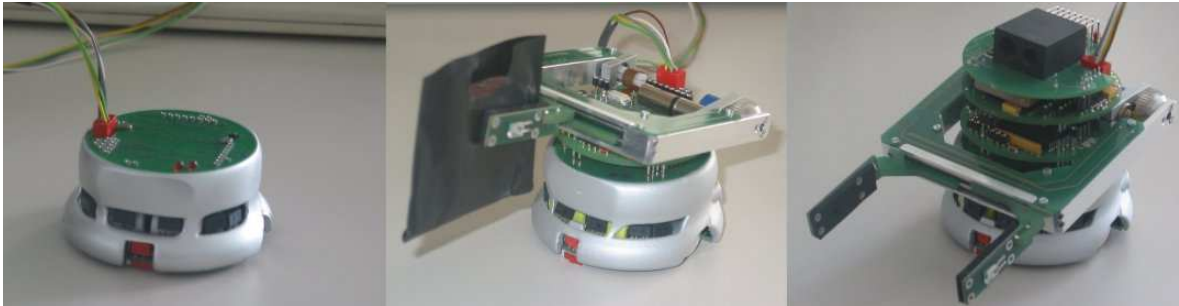


Figure 1: Khepera base setup (left), With gripper (middle), With gripper and camera (right).

2 Task

Write a GUI for the Khepera, including gripper and camera. Keep usability in mind! Decide for yourself, what functionality you carry out to the user.

Download and extract `Khepera.zip` from the GUI homepage¹. The archives `Source`-directory contains the interface to the robot, as well as a simple test program and a `Makefile` to compile it. The `Doc`-directory contains several Documents that give information on the interpretation and valid ranges of the interface function parameters and return values.

3 Need help? Criticism? Want the robots?

Ask Stefan (Room 1212, phone 7282). Keep in mind: We need your feedback to know what we can do better next year.

Have fun, Ralf & Stefan

¹<http://www-md.e-technik.uni-rostock.de/ma/rs/lv/lvgui.html>