

20 Quick Start



Kelvin Tool Changer





Quick Start

By Henning Forbech, 4TECH Robotics Aps Version 1.1 15 April 2020

To use the Kelvin Tool Changer the robot must run the Kelvin program (Kelvin.urp). This Kelvin program is a kind of shell program that executes all the operations with the tool changer and allows the operator to run programs as subprograms.

At start up the Kelvin program will first move the robot arm to a fixed position. This is the "Ready" position and all programs start and end in this position. After a short check of the status for the robot the Kelvin program will ask the user which subprogram to run. Each subprogram has a number and when one job is finished the user can choose what to do next by entering the next task number.

The Kelvin program has some small standard programs to demonstrate the tool changer functions and some service programs for the robot installation.



The Kelvin program will handle all tool changer operations and will hand over the tool to the user program in the "Ready" position.

For first time users of the Kelvin Tool Changer it is recommended to run some of the simple demo programs just to see the basic function of the program and the hardware.

Feel free to test your own program on the robot. Take a look into the code for some of the standard programs to see the structure of the code.

A user manual can be found at the robot computer or downloaded from the url below.

Kelvin Programs:

1: Initializing Procedure

A self-test program that is automatically executed at the start of the Kelvin program. This program can also be used to check that the robot and the tool changer are ready for operation.

10: Demo: Tool-A

This program only picks up and drops off tool-A to demonstrate the basic tool changer functions.

13: Change between Tool-A, Tool-B and Tool-C

This program only picks up and drops off tool-A, B and C to demonstrate the basic tool changer functions.

14: Demonstrating manual Tool Change

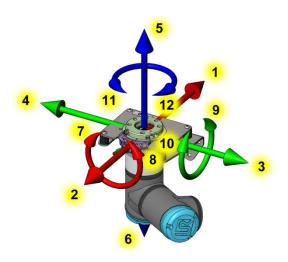
Service program that allows the user to change the tool manually.

88: Full Menu

List of all programs set up for the Kelvin demonstration program.

0: End Program

This program will shut down the Kelvin program. The values that have been changed or updated are saved as Installations Variables and will be reloaded next time the program is started.



<- Numbers for fine tuning the position of docking station, see chapters 7.4 and #42

Comments and questions are welcome: kelvin@toolchanger.eu

Download the full user manual here:



www.toolchanger.eu