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# Manual SERVICEBOX SOLOASSIST II

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Do not forward this document to end users!

## 1. Introduction

The SERVICEBOX is designed to connect a Standard PC to a SOLOASSISTII and JOYSTICK. The SERVICE PROGRAMM gives basic diagnostic functions and allows the calibration and software update of the SOLOASSIST.

## 2. Requirements

### 2.1 Hardware

Processor: 1,5 MHz  
 Hard disc: 50 MB free  
 Memory: 4 GB  
 USB Port: 2.0 or better

### 2.2 Software

Operating system: Windows 7, 8, 8.1, 10

DotNet Framework 3.5 and 4.5

### 3. Component overview

SERVICEBOX  
USB connection cable  
Connection cable SERVICEBOX <-> SOLOASSIST

### 4. Installation

The service program consists of two components. A windows driver for the service box and the service program itself. If the installation package is provide as ZIP file. Please extract all files in a temporary folder first.

**Attention! Always install drivers first!**

**Administrator rights may be needed.**

Driver Installation

- ➔ Double click DriverInstall.bat and follow the instructions. A restart of your computer may be needed.

Program installation

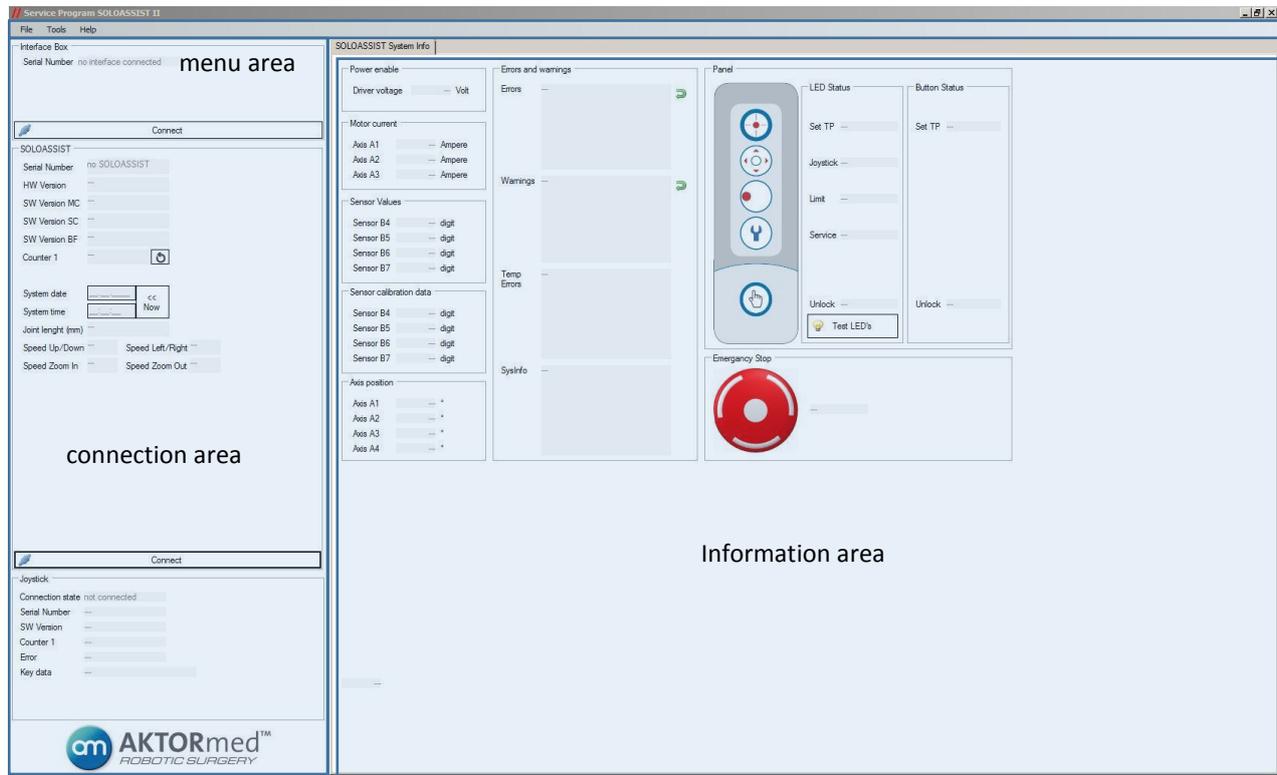
- ➔ Connect the SERVICEBOX before installing the Service software.  
Start Setup.exe and follow the instructions

### 5. Service Program

#### 5.1 Hardware connection

Connect the USB Socket of the SERVICEBOX with your PC. Connect blue end of the connection cable with the SERVICEBOX and the black end with the SOLOASSISTII socket with the SOLOASSIST. In addition you may connect a JOYSTICK to the SERVICEBOX using the JOYSTICK socket.

## 5.2 User Interface



The user interface consists of three main parts:

- Menu area
- Connection area
- Information area

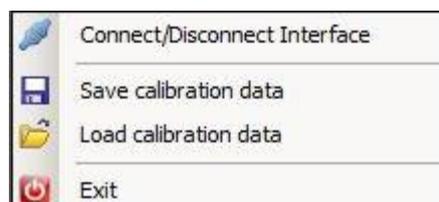
The menu gives access to the program functions described under 5.4 and 5.5

In the connection area are basic information about the connected hardware available.

The information area shows detailed information on the connected SOLOASSIST system

## 5.3 Connections

### 5.4 File menu



CONNECT / DISCONNECT Interface

Normally the SERVICE BOX is connected automatically. If the box is not recognized by the SERVICE PROGRAM you can try to connect manually

## SAVE calibration data

Saves the calibration data of the connected SOLOASSIST to a file.

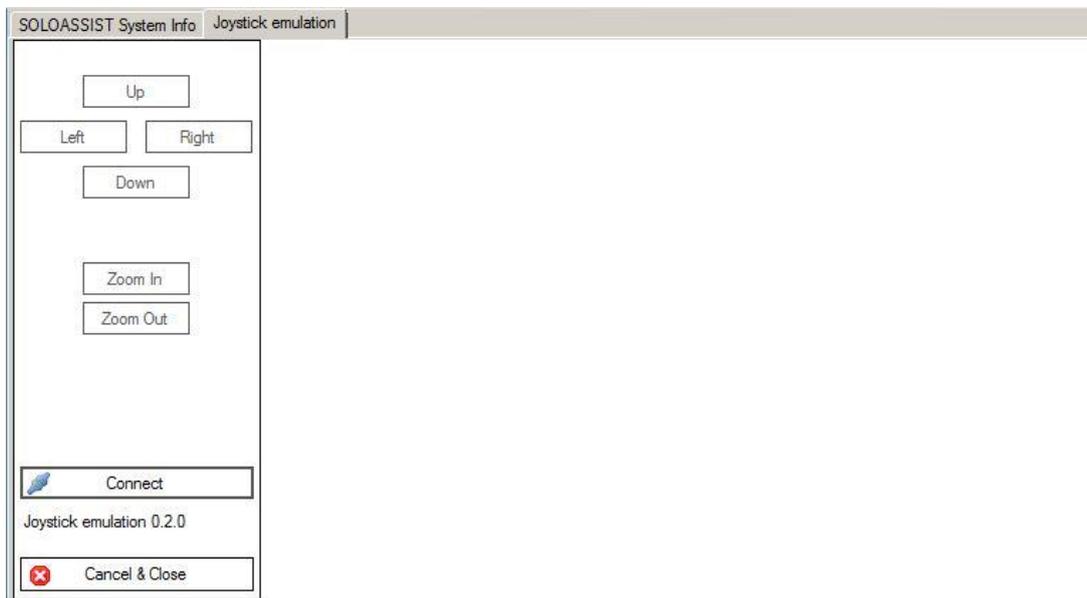
## LOAD calibration data

Loads the calibration data from a file to the connected SOLOASSIST.

➔ Warning! Be sure the calibration file fits to the connected SOLOASSIST.

## 5.5 Tools menu

### 5.5.1 Joystick emulation



The joystick emulation allows to move the connected SOLOASSIST like with a JOYSTICK. Press “CONNECT” to start the emulation.

In the JOYSTICK section of the CONNECTION AREA you will see the following information's:



Press a button to move the SOLOASSIST.

➔ It is not possible to use the JOYSTICK emulation, if there is a JOYSTICK connected to the SERVICEBOX

## 5.5.2 Calibration

→ Warning! Wrong calibration may cause unintended movements!

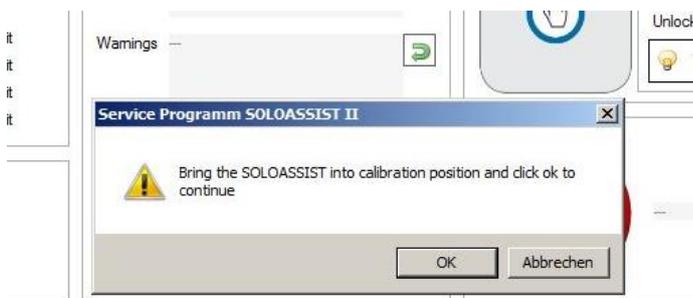
Bring the SOLOASSIST in calibration position



Axis 1 in middle position, Axis 2 in lowest position, Axis 3 in highest position, Axis 4 in middle position



Press ok



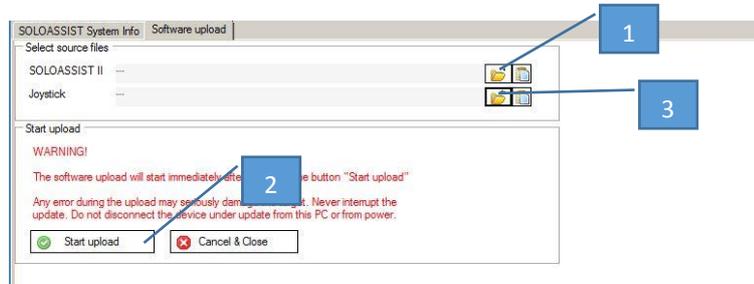
### 5.5.3 LED Test

All LED's on the control panel of the SOLOASSIST will flash.

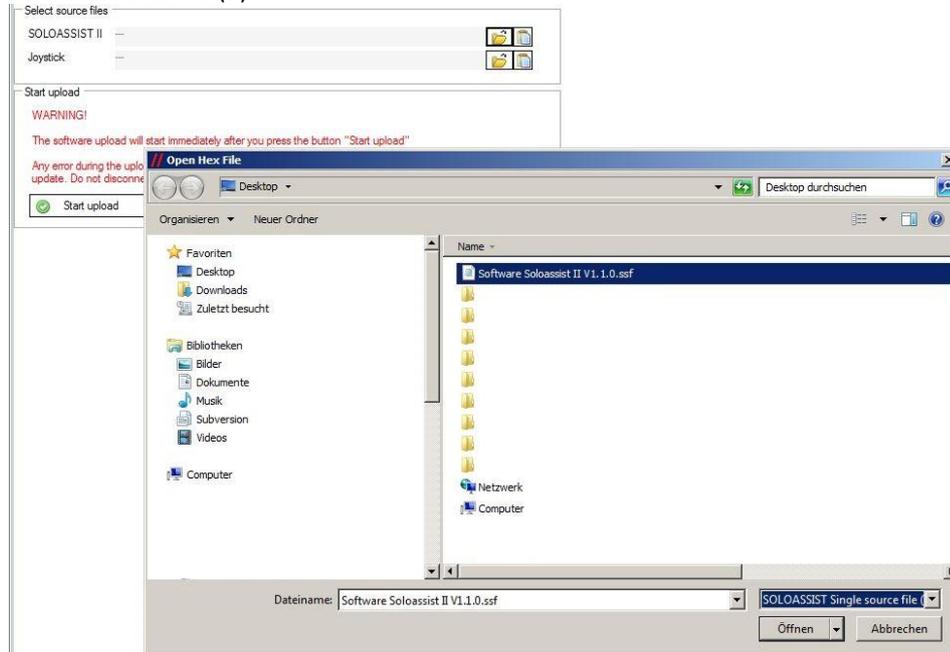
### 5.5.4 Software upload

This tool allows to update the system software of the connected SOLOASSIST and/or JOYSTICK.

#### SOLOASSIST update



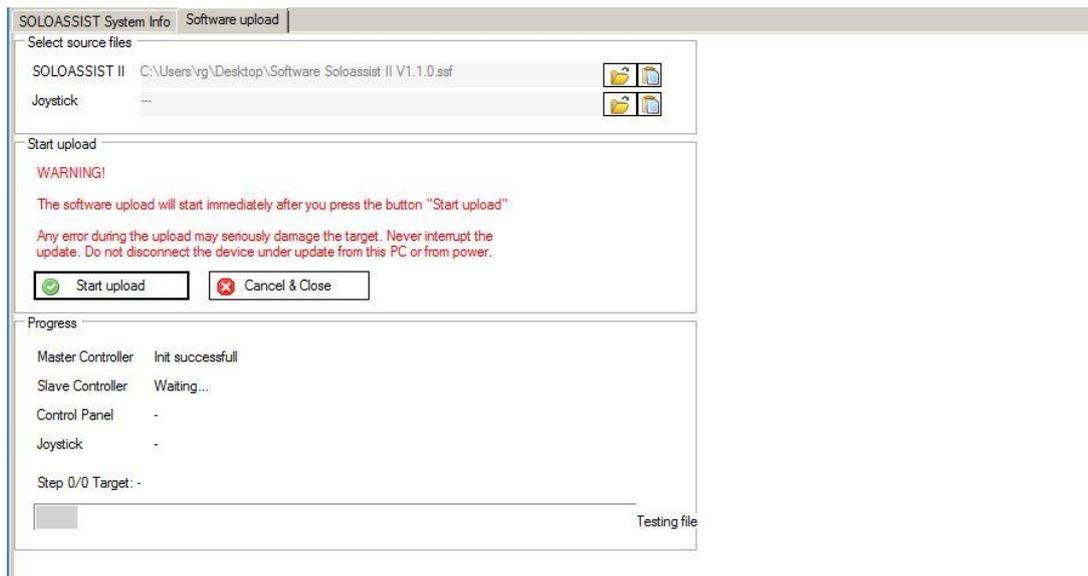
#### Select a source file (1)



The SOLOASSIST system software is provided as a "SSF" File. This file contains software for all control boards of the SOLOASSIST.

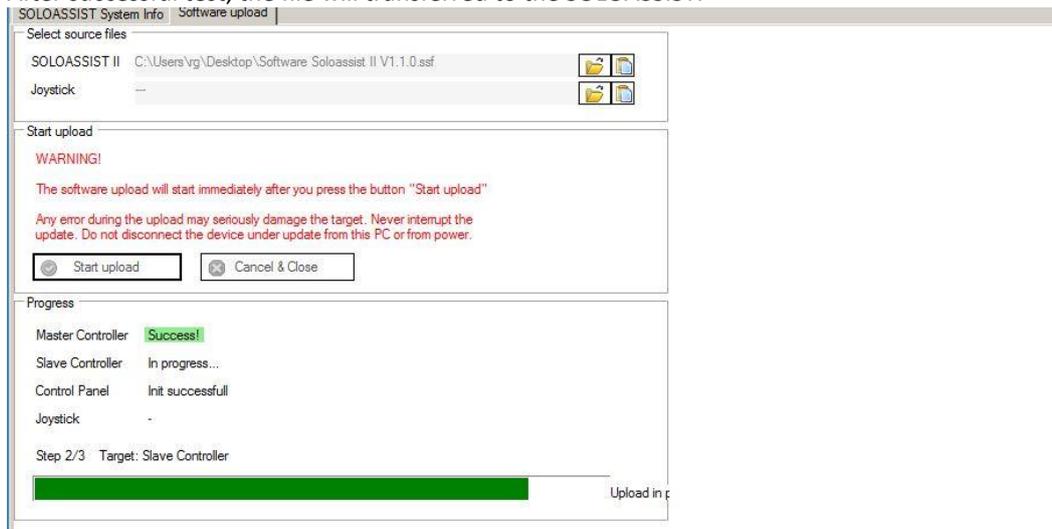
Press "Start upload" (2)

After starting the upload the SERVICE PROGRAM will test the file integrity of the SSF file and initialize the update process.

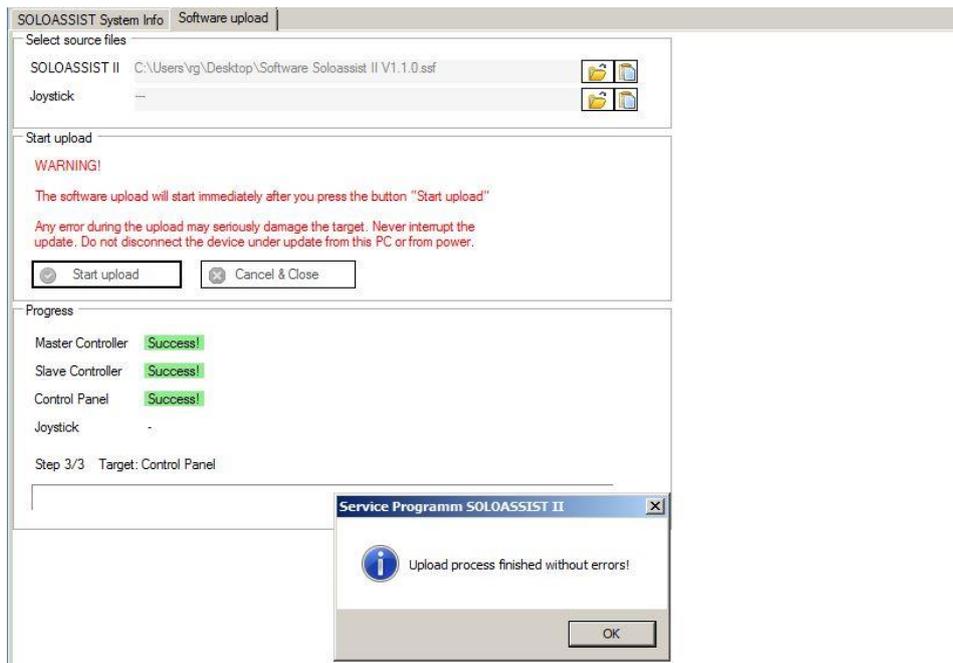


**WARNING! Never interrupt the upload process. This may cause serious damage to the control boards of the SOLOASSIST!**

After successful test, the file will transferred to the SOLOASSIST.



After successful installation you will get a confirmation box. To finalize the upload it is necessary to restart the SOLOASSIST by disconnecting and reconnecting the power supply.



## JOYSTICK update

The same procedure as for SOLOASSIST update is used to update a JOYSTICK. Select a source file (3) and press “Start upload”.

The software for the JOYSTICK is provided as “HEX” file.

**WARNING! Never interrupt the upload process. This may cause serious damage to JOYSTICK!**

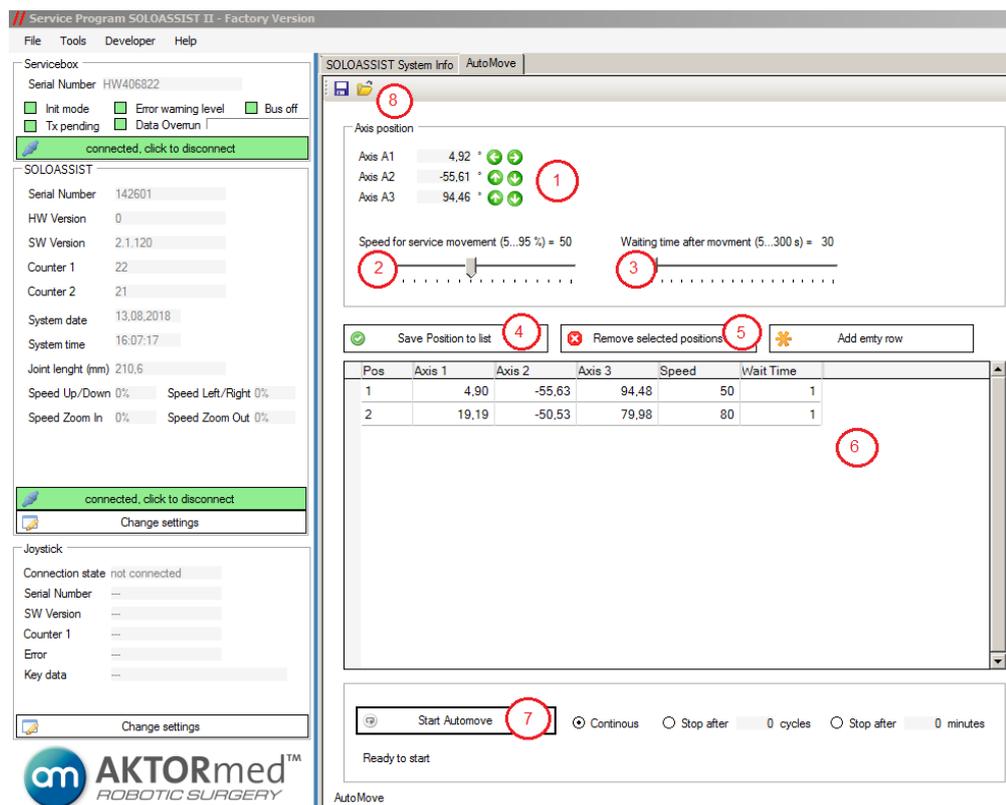
## 5.5.5 AutoMove

(Service Program Software Version 2.2 or higher)

The AutoMove function makes it easy to define automatic movements. Any number of positions can be defined which are moved to one after the other.

The movement can be executed until a manual abort, up to a certain number of cycles or until a period of time has elapsed. If a key of a connected joystick is pressed or a voice command is recognized, the automatic sequence is also stopped.

In addition, all axes can be moved individually at the touch of a button.



Description of functions:

- 1) Buttons for manual movement
- 2) Current axis speed setting
- 3) Waiting time. This defines the time the cycle is pausing after a position is reached
- 4) Store the current position in the list
- 5) Remove a selected line from the list
- 6) List area. All defined positions are shown here, a minimum of two positions is needed. Values can be changed by selecting cells.
- 7) Start/Stop movement
- 8) Save all definitions to a file (xxx.s2m) or load from a file

## 5.6 Help menu

### 5.6.1 About

This menu item shows a box with information's about the version of the SERVICE SOFTWARE