

User Guide – TinyCtrl-Updater

Software Version 01-005, Oct. 7th, 2019

support@cpr-robotics.com

1. Scope of the Software

This software allows to update the Commonplace Robotics embedded robot control. The software does not require installation, it can be run from e.g. a USB drive.

2. Safety



- Press the emergency button to prevent any motions of the robot
- When upgrading the TinyCtrl and CPRog software existing files will be overwritten. Any robot specific changes have to be added again.
- Please check your robots programs slowly (override $\leq 30\%$) first after upgrade! Be prepared to stop the robot with the emergency stop!

3. Linux: Updating the TinyCtrl robot control software

Step 1:

Download the file Updater_TCVxxx_CPRogVyyy.zip from wiki.cpr-robots.com

Step 2:

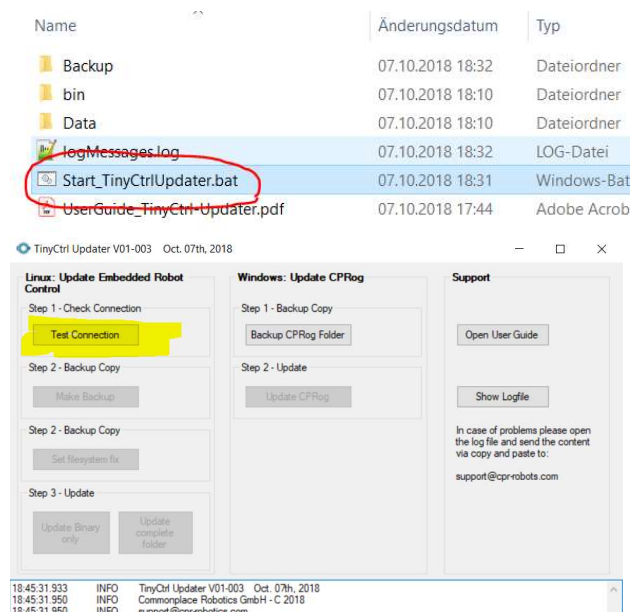
Extract the .zip file. An installation is not necessary, it will also work from USB disc.

Step 3:

Start the software with a double click on Start_TinyCtrlUpdater.bat

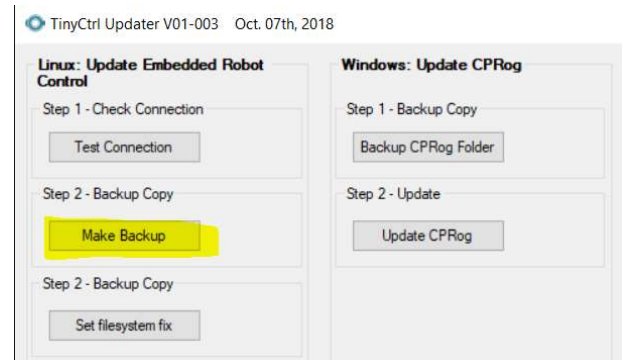
Step 4:

Check the connection to the robot. Please refer to the robot documentation on how to set up the Ethernet connection: local IP = 192.168.3.1

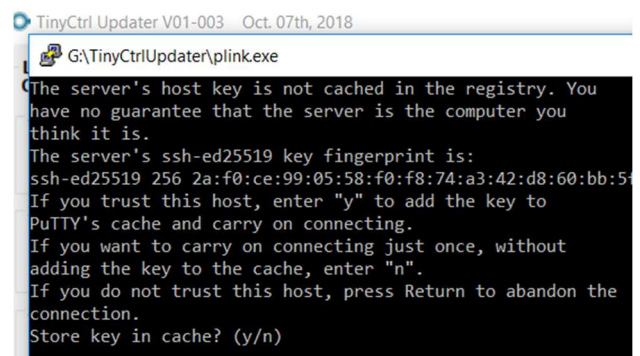


Step 5:

Backup the current control files from the robot to the local /Backup folder

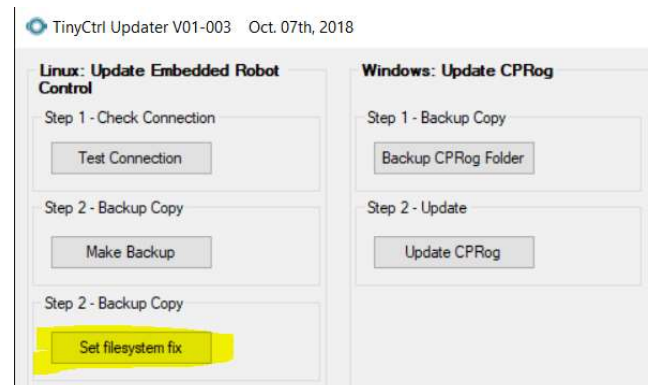


It might be necessary to press 'y' and 'return' when required by the host key manager.



Step 6:

If your robolink arm was delivered before October 2018: Patch the linux filesystem on the robot



Step 7:

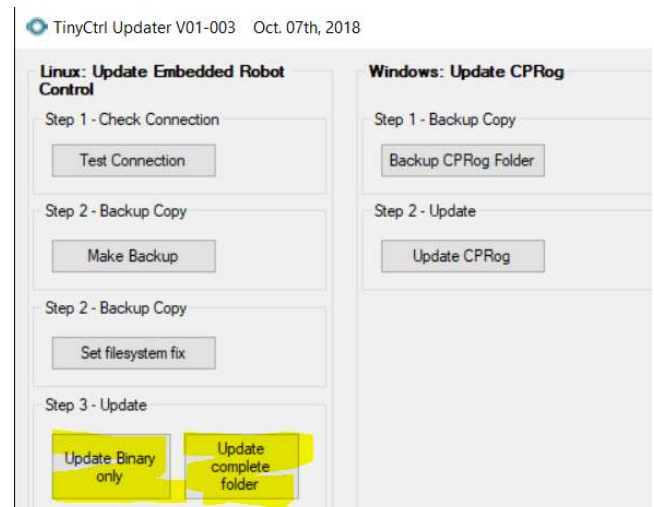
Update the robot control:

Recommended: Press "Update binary only" if your system is working correctly and you only want to upgrade to a new version.

There is only one file to choose in the file dialog. Your robot configuration and programs remain the same.

For a full update:

Press "Update complete folder" to overwrite the binary and all configuration files. It might be necessary to download the robot programs again.

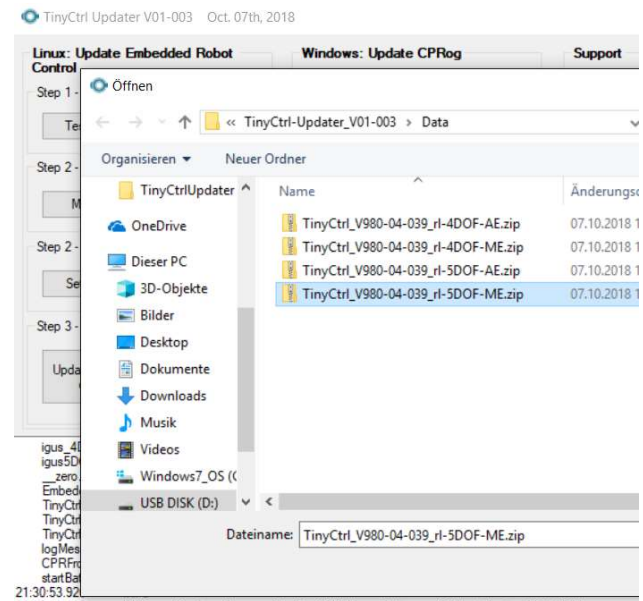


There are different .zip files for the different robot versions:

- RL-D-DCi-4S-M for a 4 axis robolink robot with integrated control, using motor encoder.
- RL-D-DCi-5S-M for a 5 axis robolink robot with integrated control, using motor encoder.

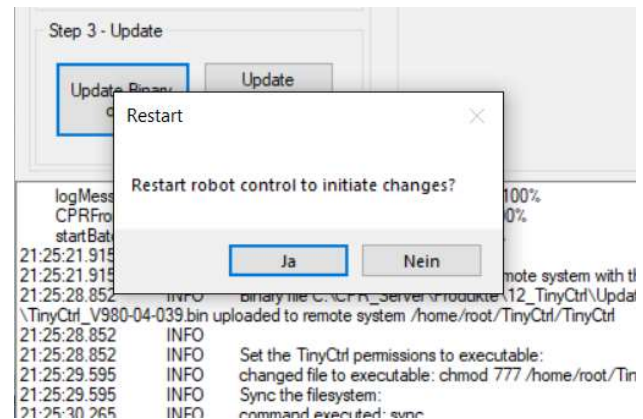
Both files are to be used with motor encoder (ME) type robots. These robots do have two cables connected to the back of each motor.

For further robot types please get in contact: support@cpr-robots.com



Step 8:

Restart the robot control.
This takes 30 to 60 seconds.



Step 9:

Test the robot:
Move all joints slowly with the operating panel.
Replay all programs with an override of 30% or less.
Be prepared to stop the robot with the emergency switch!

Step 10:

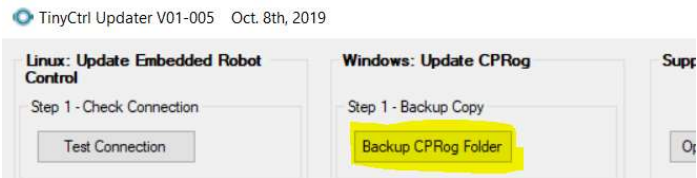
Update CPRog and choose the according project as described in the next section.

4. Windows: Updating the CPRog robot control software

The Updater also contains the current CPRog version which is designed to operate with the TinyCtrl versions. It is necessary to also update CPRog!

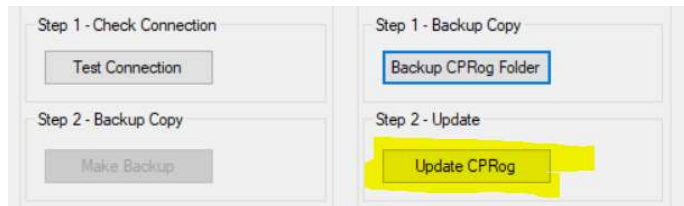
Step 1:

Close CPRog if it is running.
In the still open updater press the button
"Backup CPRog folder"



Step 2:

Press the "Update CPRog" button. This will start the CPRog installer.



Step 3:

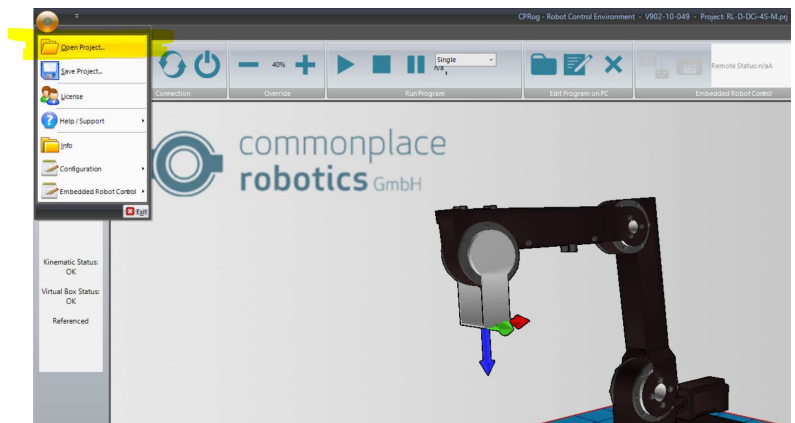
Follow the CPRog installation guide as shown in the CPRog documentation, also available in the updater, folder "Documentation"



Step 4:

Choose the correct project for your robot.

When connecting to the robot the configuration will be checked. If there is a mismatch between TinyCtrl and CPRog you will see an error message with the configuration on both sides. In this case please load the according CPRog project.



Please check your robot programs slowly (override $\leq 30\%$) first after upgrade!
Be prepared to stop the robot with the emergency stop!

5. Support

If there are problems please send a description of the problem, the robot type and serial number and the log file contents to: support@cpr-robotics.com