

# Occuring errors

Jeppe Fjederholdt Nielsen & Frederik Hartig

May 2020

## Contents

<b>1</b>	<b>Introduction</b>	<b>1</b>
<b>2</b>	<b>General guide lines</b>	<b>1</b>
<b>3</b>	<b>roboStacker errors</b>	<b>2</b>
3.1	File deleted . . . . .	2
3.2	IP setup . . . . .	2
3.3	Program opening in simulating . . . . .	2
<b>4</b>	<b>Panel PC errors</b>	<b>3</b>
<b>5</b>	<b>Advantys errors</b>	<b>4</b>
<b>6</b>	<b>Mechanical software errors</b>	<b>5</b>
6.1	Motor, Encoder Brakes, HAC & SAC . . . . .	5

# **1 Introduction**

This document explains why some errors occur and how to fix them.

## **2 General guide lines**

Some general error detection advise, is to first check the connection of all objects in question. See if the cables are properly connected, the hardware is properly mounted, and the software running has the right settings for the roboStacker.

## 3 roboStacker errors

This chapter is about roboStacker errors. This chapter will deal with errors that occur while/when opening the roboStacker.

### 3.1 File deleted

Does the program not open at all and there is no information on in the terminal check the system.int file. a bug in the program can on some very rare occasions delete all the text in the system.int file.

The reason is not yet discovered, but the theory is that it has something to do with the program or the computer being shut down wrongly.

### 3.2 IP setup

It is important the PC IP in the system.int file is the same as the IP on the computer. the general IP used in the roboStacker program is

192.168.0.96 or 192.168.0.151

The trio IP also needs to be correct, but that will be explained in another section.

### 3.3 Program opening in simulating

There can be many reasons for the roboStacker to open in simulating mode.

- The most common mistake is that the Ethernet connection to the PC or trio, is incorrectly plugged in.
- Another common mistake is that the IPv4 address on the PC is not the same as the IPv4 address in the system.int file.
- If the program is opened from a file or the flashcard make sure the simulating not is enabled.

## 4 Panel PC errors

In this chapter errors/mistakes for a Panel PC will be examined.

Error	Error reason	Solution
No Touch	Wrong touch port used	Set touchctrltype=x in the system.int file to another number from 0-3
No/Uneven Touch	touch screen not calibrated properly	Set touch.initialized=0 and make the calibrating
No Ethernet communication	Wrong port or unstable port	Try the other port, and make sure there is light in the Ethernet switch

Table 1: Panel PC errors

## 5 Advantys errors

In this chapter errors/mistakes for a Advantys will be examined.

HMI error message	Advantys Error	Solution
IO-error: Connection to advantys is missing.	Communication error	This error can be caused by too much traffic, e.g. if an input on the advantys is improper an input error will run wild causing communication noise. Another cause would be bad ethernet connection.
N/A	Advantys module error	If the statemachine, using the input, has the input set to 1 in ST_IDLE then this error will occur.

Table 2: HMI Advantys Errors

## 6 Mechanical software errors

In this section, the errors that occur because of mechanic faults will be explained.

### 6.1 Motor, Encoder Brakes, HAC & SAC

It is important that the motor drivers, HAC and SAC, are properly connected, both on the trio side and the motor side. [BE AWARE OF THE MOTOR AND ENCODER CABLES]

HMI error message	Hardware Error	Solution
Current overload on axis X	The motor has too much resistance	Check if the brakes are working or if the load is too heavy.
Following error axis X	The motor is either moving less or more than the encoders following error limits	Check if brakes are working, heavy load, robot collision,
No SLM module for axis X	One of the SLM modules in the trio is not working properly	Try switching the SLM module related to the axis, or try switching encoder on the motor heavy load, robot collision,
Unable to start drive for axis X	SLM failure, cable connection	try the above solution
Current mismatch too large for axis X	Encoder is broken	change encoder

Table 3: HMI Hardware Errors