

# TECHNICAL INSTRUCTION

Parameterization & change of direction of  
rotation (smart motor)



## Description

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The technical instruction describes the step-by step process for parameterizing and changing the direction of rotation of the smart motors.

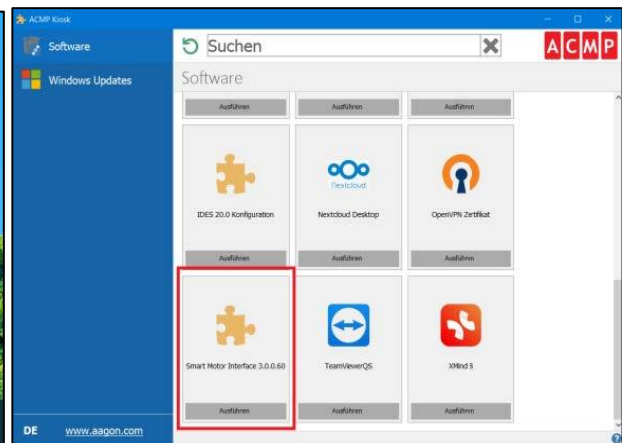
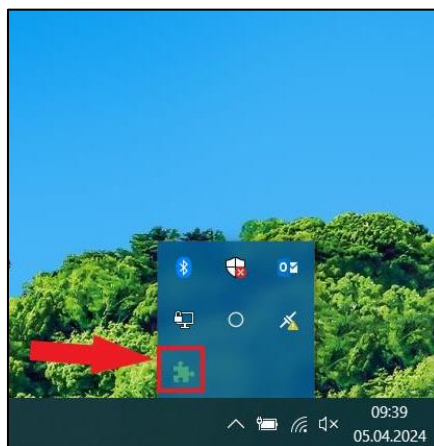
**Step 1** Establish connection

On motor side	Wire	Interface box RS232
Red	1	(B) GND
Violet	2	TxD
Black	3	RxD



**Step 2** Download of the software

Open the AMCP Kiosk and download the programm „Smart Motor Interface“

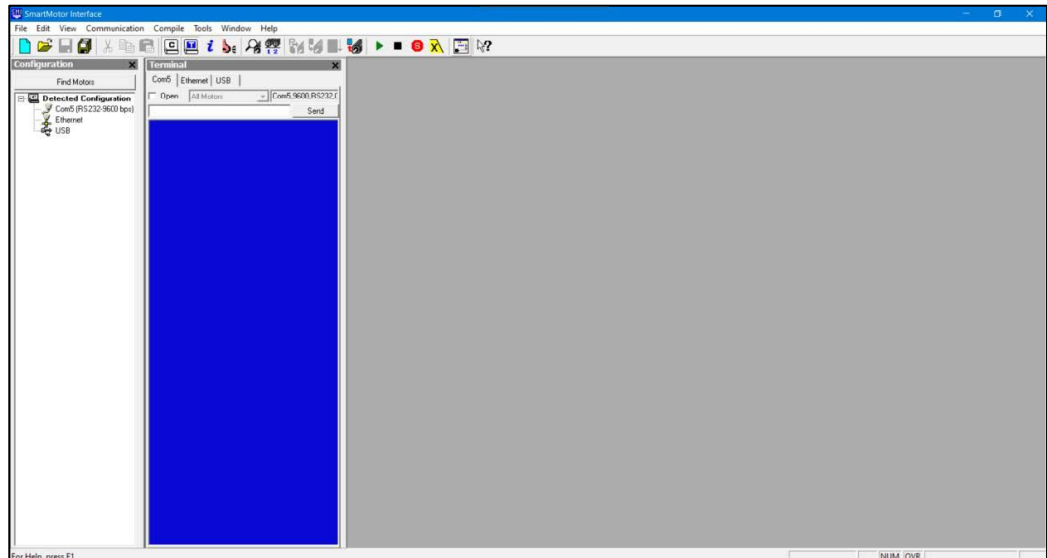


→ After installation, open the program "SmartMotor Interface"

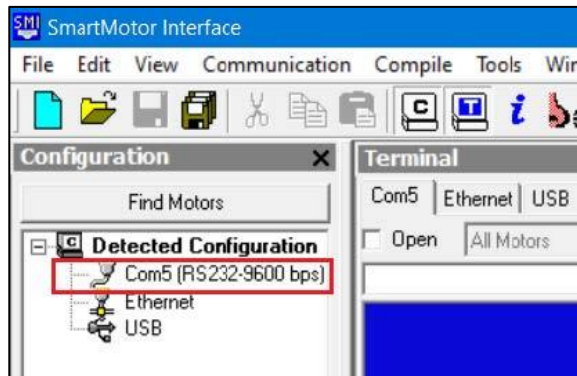


Step 3 Using the programm

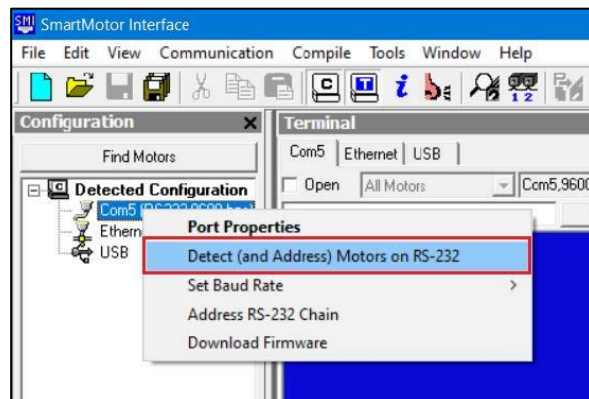
3.1 Overview of the programm after the start



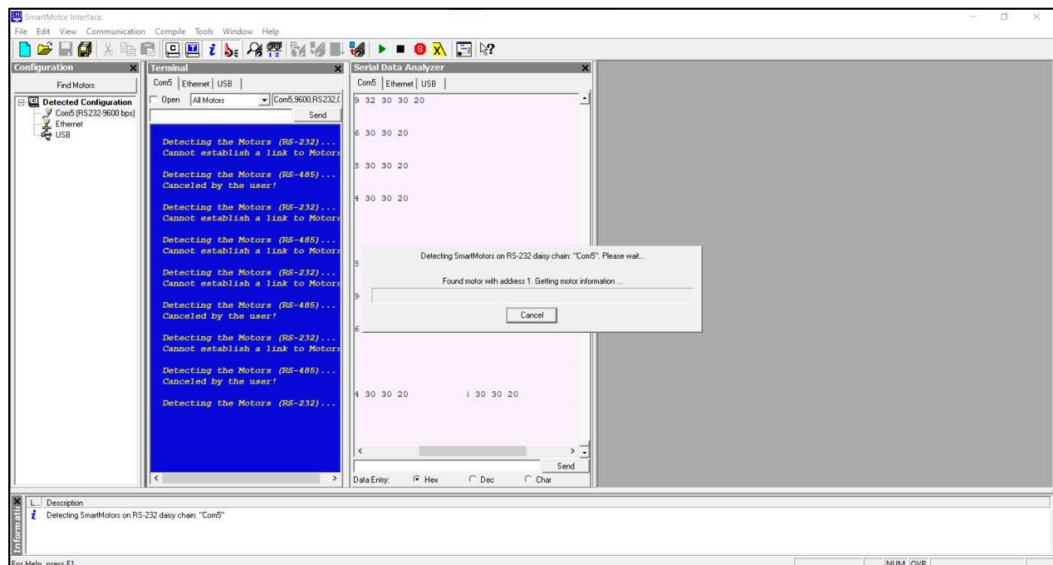
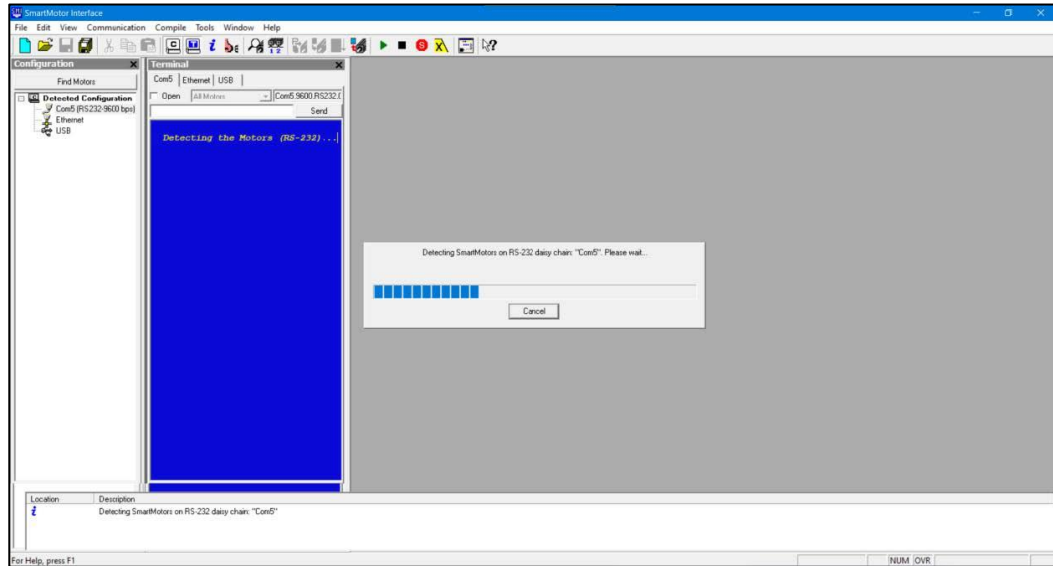
3.2 **IMPORTANT:** the COM-Port has to be configured. It will then be visible in the list on the left.



3.3 Right mouse button and click on "Detect (and Address) Motors on RS-232"



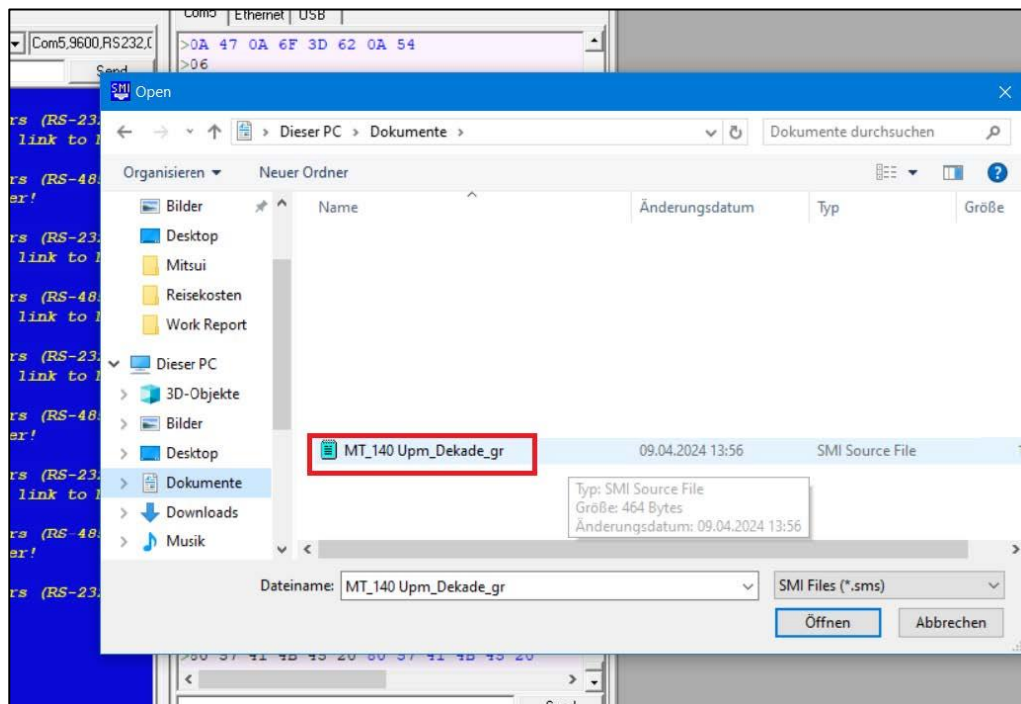
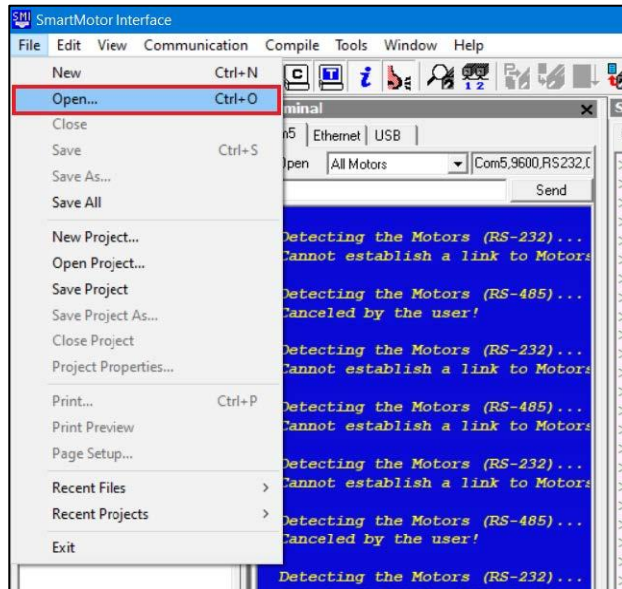
### 3.4 Motors are being searched



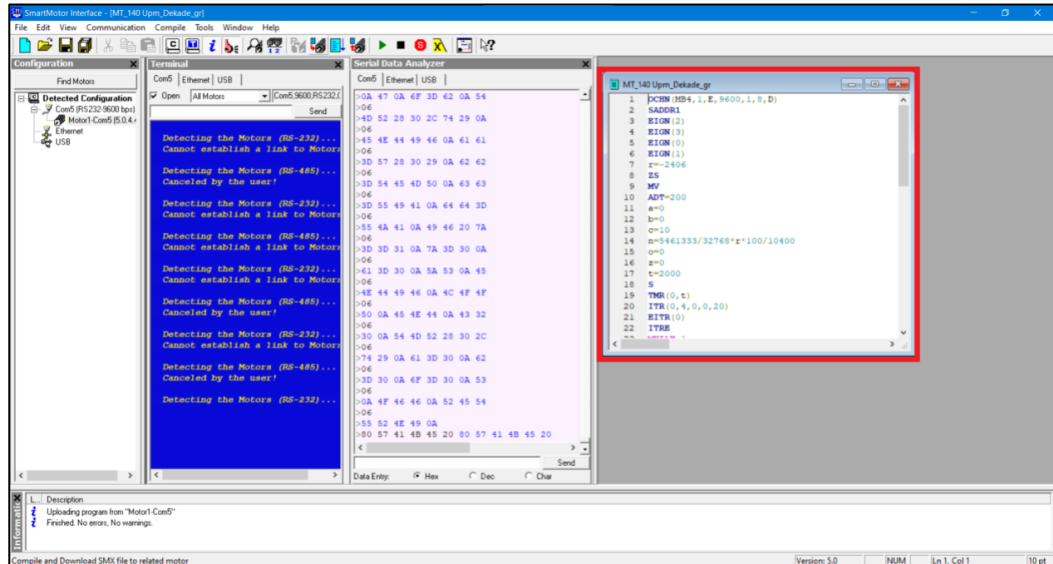
Step 4

4.1 Parameter set from PC to controller

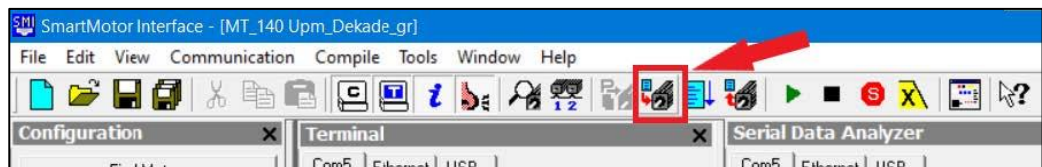
4.1.1 Open the parameter set via "File - open..." and load it into the program



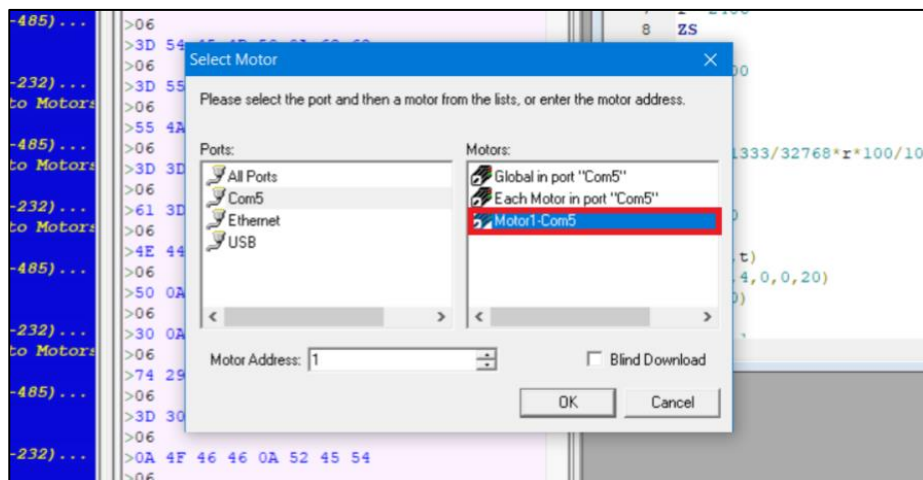
4.1.2 The window with the corresponding programming appears in the right-hand part of the program.



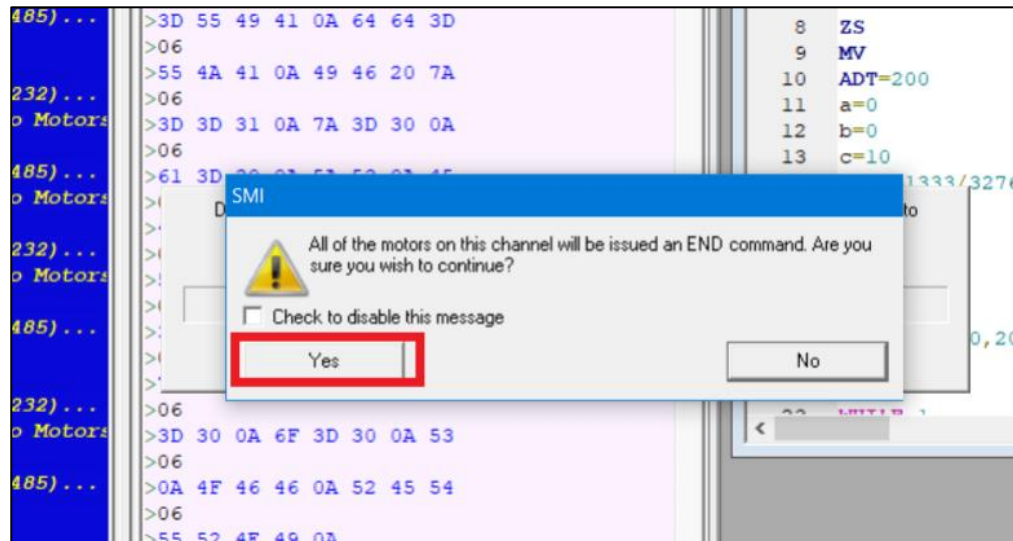
4.1.3 Then use the "Compile and Download Program (F5)" button to download the parameter set to the motor.



4.1.4 The "Select Motor" window opens, select the relevant motor and press "OK".



#### 4.1.5. The following message appears



Press „Yes“ to start the download to the motor

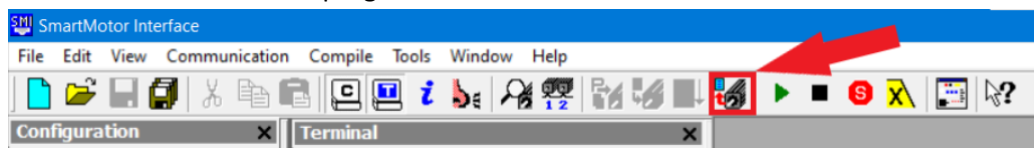
**IMPORTANT:** After the transfer, the motor must be de-energized once. Then apply voltage again and the new parameter set is ready for use.

#### 4.2 Changing the parameter set / direction of rotation

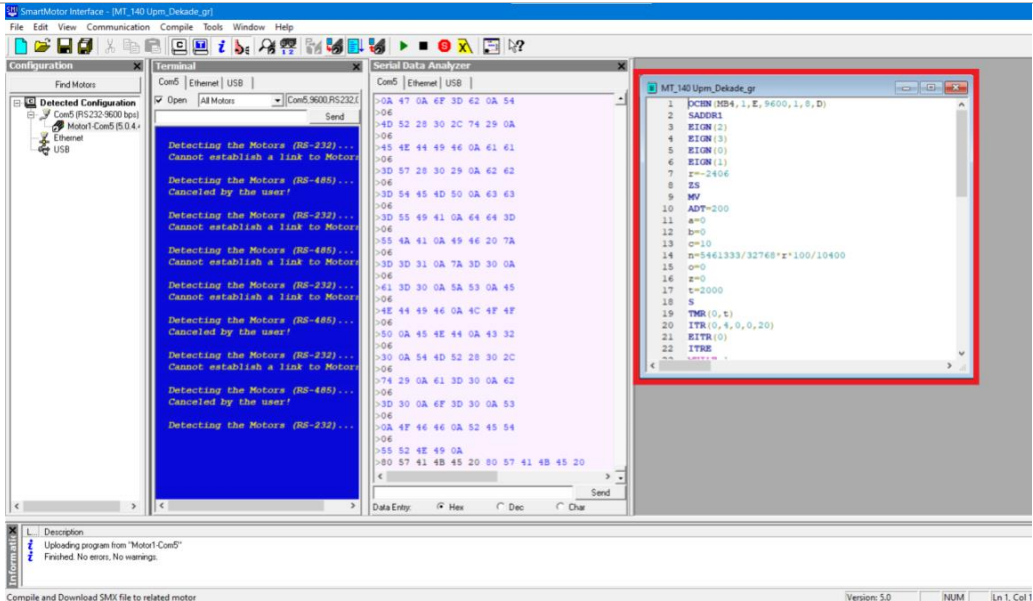
If the motor rotates in the wrong direction, this can be done by changing the parameter set.

Proceed in the same way up to and including point "3.4".

Then use the "Upload program" button to load the current parameter set of the connected motor into the program.



The window with the parameter set of the connected motor then appears.



The screenshot shows the SmartMotor Interface software. The terminal window displays the following messages:

```

Detecting the Motors (RS-232)...
Cannot establish a link to Motors
Detecting the Motors (RS-485)...
Canceled by the user!
Detecting the Motors (RS-232)...
Cannot establish a link to Motors
Detecting the Motors (RS-485)...
Canceled by the user!
Detecting the Motors (RS-232)...
Cannot establish a link to Motors
Detecting the Motors (RS-485)...
Canceled by the user!
Detecting the Motors (RS-232)...
Cannot establish a link to Motors
Detecting the Motors (RS-485)...
Canceled by the user!
Detecting the Motors (RS-232)...
Cannot establish a link to Motors
Detecting the Motors (RS-485)...
Canceled by the user!
Detecting the Motors (RS-232)...

```

The code editor window shows the following code with line 7 highlighted:

```

1 [C]IN HB4, 1, E, 9600, 1, 0, D)
2 SADDR1
3 ETON (2)
4 ETON (3)
5 ETON (0)
6 ETON (1)
7 r=-2406
8 IS
9 MV
10 ADT=200
11 a=0
12 b=0
13 c=10
14 n=5461339/32768*r*100/10400
15 o=0
16 z=0
17 t=2000
18 S
19 TMR (0, 5)
20 ITR (0, 4, 0, 0, 20)
21 EITR (0)
22 ITRR

```

Below the terminal and code editor, an information window displays:

```

Description
Uploading program from "Motor1-Con5"
Finished. No errors. No warnings.

```

At the bottom of the interface, there is a status bar with the text: "Compile and Download SMX file to related motor" and "Version: 5.0 INUM Ln 1, Col 1".

Here the minus must be removed or added in the line "r="

Example: r=-2406 or r=2406

This changes the direction of rotation.

After changing the line, the program is reloaded onto the motor (see point 4.1.3. and following). Disconnect the motor from the power supply after the update, then apply voltage again and the direction of rotation is changed.