DRIVER INSTALLATION GUIDE

INOVO ROBOTICS MODULAR ARM

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Product version 5.6.0

Introduction

This manual describes the driver setup for end of arm tools and accessories

Relevant to system with Software versions

RCU	v0.8.2
Engineering UI	v0.2.6
Wrist Controllers	v0.1.12

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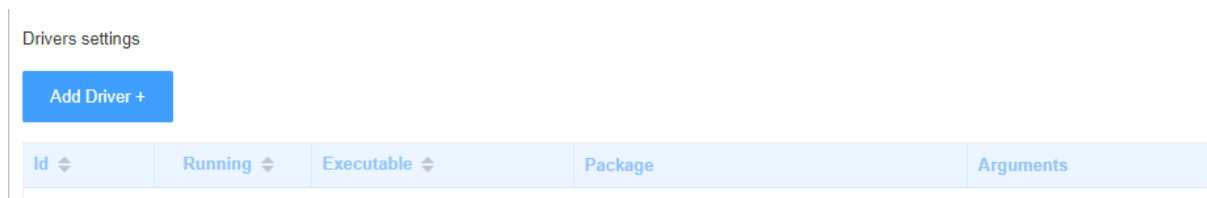
1.   Drivers

1.1.   Driver installation Process

⚙️

Click on the settings button on the left side tool bar

Go to the Driver settings section

Drivers settings

Add Driver +

Id ⇕	Running ⇕	Executable ⇕	Package	Arguments

If there is an existing driver you don't want to use at this time remove it first by clicking on the trash can icon

on the right 🗑️

Click on the 'Add Driver' button

Enter a reference name for the driver that will be easy to remember, ie 'RobotiQ2F'

Enter the Executable, Package and Args exactly as provided by the manufacture, be careful not to include and spaces or extra characters, a reference table can be found at the end for this document.

When complete press Save

add   ×

* Id   [id   ]

* Package   [package   ]

* Executable [executable   ]

Args   [args   ]

Cancel   **Save**

Once the driver is loaded it will be listed as below, the green stop indicates the driver is active

Id ⇕	Running ⇕	Executable ⇕	Package	Arguments
RobotiQ2F	🟢	robotiqd	robotiqd	_dev:=wrist

The drivers remaining installed across power cycles and are independent of the programmed loaded

1.2.   Generic Modbus driver


Example Args: `_dev:=/dev/ttyACM0 _node_id:=9 _baud_rate:=115200`

Where `_dev:=` should be set to `wrist` if connected to the end of the arm or the device name if connected to the RCU, the node id and baud rate should also be update as required for your device.

Note: The modbus read/write blocks don't currently list the available devices so this must be entered manually in the form: "/devices/[id used in driver form]", ie:
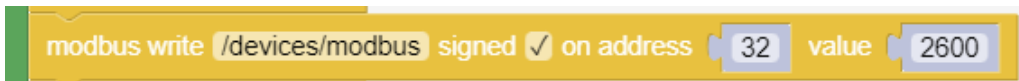
1.3. Manufacturers communications settings reference

Manufacturer	Model	Package	Executable	Args	Baud Rate	modbus_parity
RobotiQ	2F-85	robotiqd	robotiqd	_dev:=wrist	115200	0
RobotiQ	2F-140	robotiqd	robotiqd	_dev:=wrist	115200	0
RobotiQ	E-Pick	robotiqd	epickd	_dev:=wrist	115200	0
OnRobot	VG10	onrobotd	onrobotd	_dev:=wrist	1000000	1
OnRobot	RG6	onrobotd	onrobot_rg	_dev:=<device> or wrist	1000000	1
OnRobot	RG2	onrobotd	onrobot_rg	_dev:=<device> or wrist	1000000	1
OnRobot	2FG7	onrobotd	onrobotd_2fg7	_dev:=<device> or wrist _finger_orientation:= true or false as in manual _finger_height – finger height in metres _fingertip_offset – offset in metres _finger_length – length in metres	1000000	1
Onrobot screwdriver	screwdriver	onrobotd	screwdriverd	_dev:=<device> or wrist	1000000	1
DH Robotics		generic_modbus_driver	generic_modbus_driver_node	dev:=wrist _node_id:=1 _baud_rate:=	115200	
Generic modbus driver	N/A	generic_modbus_driver	generic_modbus_driver_node	_dev:=<device> or wrist (default = "" which loads a dummy driver for simulation) _node_id:=<value> (default = 144) _baud_rate:=<value> (default = 9600) _parity:=<char> (default = 'N') _data_bits:=<value> (default = 8) _stop_bits:=<value> (default = 1)	N/A	N/A