

## 1. Additional Digital I/Os

### 1.1 Hardware configuration

Do not hotplug!

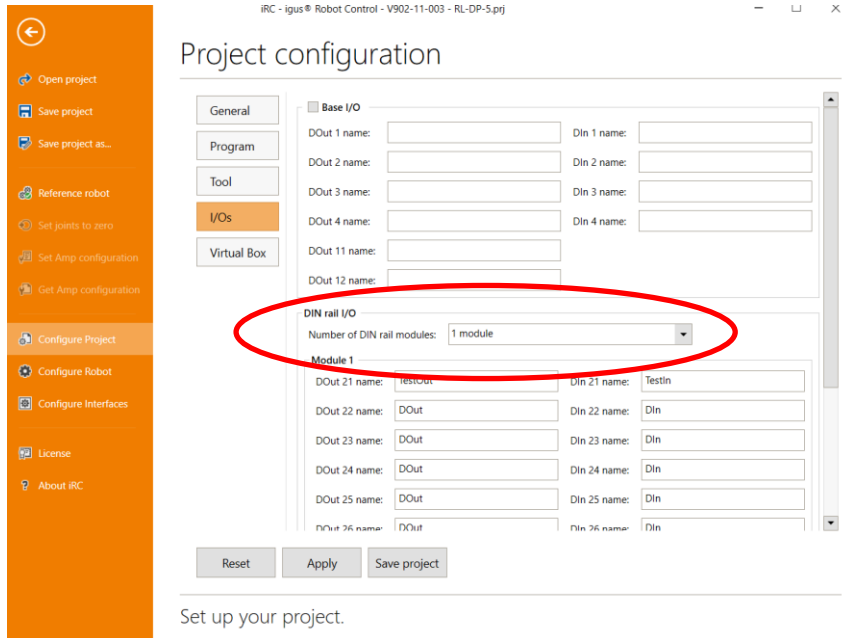
Disconnect the control unit from mains power before changing components or plugging / unplugging cables!

- To connect an I/O Module, first add the bus extender(s) to the DIN rail bus. Click the extenders into the Rail and push them into the existing bus to make the electrical connection.
- Now plug in the additional digital IO module.
- Set the CAN ID with the selector switch on the front face (see image below):
  - First (existing) IO module: 0 (this results in CAN ID 0x70 = 112)
  - Second (additional) IO module: 2 (this results in CAN ID 0x80 = 128)
  - Third (additional) IO module: 4 (this results in CAN ID 0x90 = 144)
- Now the software needs to be told that there is an additional module present. See Section 1.2.



## 1.2 Software configuration

The number of available inputs and outputs must be set. "Configure Project → I/Os".



Configuration of Inputs / Outputs in the backstage area.

For the robolink robot control, the "Base I/O" area is not used.

The "DIN rail I/O" section is where additional modules can be configured.

- The standard Robot Control comes with one DIO Module with 7 inputs and 7 outputs. Up to two additional modules can be added.
- When a DIO Module is added, the "Number of DIN rail modules" must be changed to "2 modules", or "3 modules".
- The channels of the I/O modules can be named for convenience, if desired. The names will show up in the "input/output" tab of the main iRC Window. For programming these names are irrelevant as the IOs are always addressed by their channel number.
- Click "Save Project" to save the new project configuration.
- The settings are automatically synced with the Embedded Computer.

Additional info: as shown in the Project configuration → I/Os section (image above), the following nomenclature is used:

- Channel Numbers of DIO Module 1: DOut21-27, Din21-27
- Channel Numbers of DIO Module 2: DOut31-37, Din31-37
- Channel Numbers of DIO Module 3: DOut41-47, Din41-47