Universal 16 channel I/O CANx extension

ENG - Data sheet
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Application

Universal 16 channel IO device is designed to be used in building automation applications as an extension module to LogicMachine series devices based on CAN FT bus. The configuration and monitoring of the device is done through separate LogicMachine canX application. The device is designed for DIN-rail mounting and requires 4 DIN-units.

Types of product

CAN-UIO16   Universal CANx bus IO module 16 AI/DO

Standards and norms compliance

CE conformity: EMBS-CE-110926/01   Electromagnetic compatibility

EMC: EN61000-6-1
                               EN61000-6-3
PCT   Certificate

Technical data:

Power supply: 12-32 VDC
Power consumption   12 mA

Interface: Universal Inputs/Outputs   16

	Analog input resolution	12bits
	Digital output current	350 mA (max 2 A per whole device)
	Wrong wiring polarity protection	
	CAN FT	1
Clamps:	CAN FT	CAN FT Connection Terminal 0.8mm2
	Inputs/Outputs	3.5mm2
	Power supply	5 mm2

Enclosure:	Material:	Polyamide
	Color:	Gray
	Dimensions:	52(W)x100(H)x56(L) mm
Protection:	IP20 according to EN 60529	
Usage temperature:	-5C … +55C	
Storage temperature:	-20C … +70C	
Net weight:	80g	
Gross weight:	94g	

⚠ **Caution**

Security advice

The installation and assembly of electrical equipment may only be performed by skilled electrician. The devices must not be used in any relation with equipment that supports, directly or indirectly, human health or life or with application that can result danger of people, animals or real value

Mounting advice

The devices are supplied in operational status. The cables connections included can be clamped to the housing if required.

Electrical connection

The devices are constructed for the operation of protective low voltage (SELV). Grounding of device not needed. When switching the power supply on or off, power surges must be avoided.

Default settings

Line ID: 0

Node ID: 1

Max. number of group addresses per object : 16

Reset to defaults

Press programming button for 5 seconds, the RED LED blinks 2 times, then release button - GREEN lights up shortly.

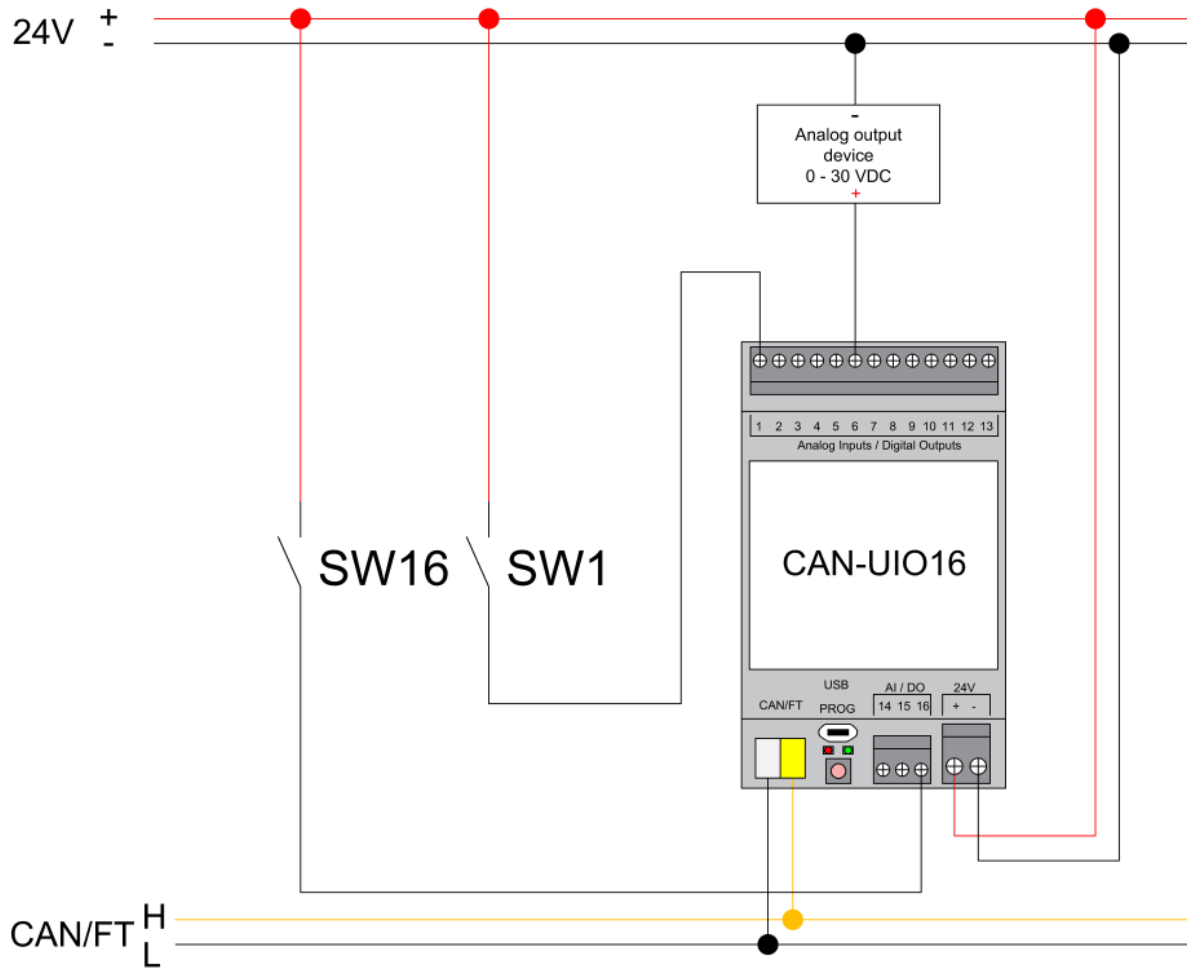**Programming physical address**

Press *Tools* → *Write device address* from CANx app. Choose address and press *Write*. Then press programming button shortly on the device, GREEN LED lights up shortly. The LED is switched off automatically in 1 second which means address is written.

1. Connection diagrams

CAN FT connection
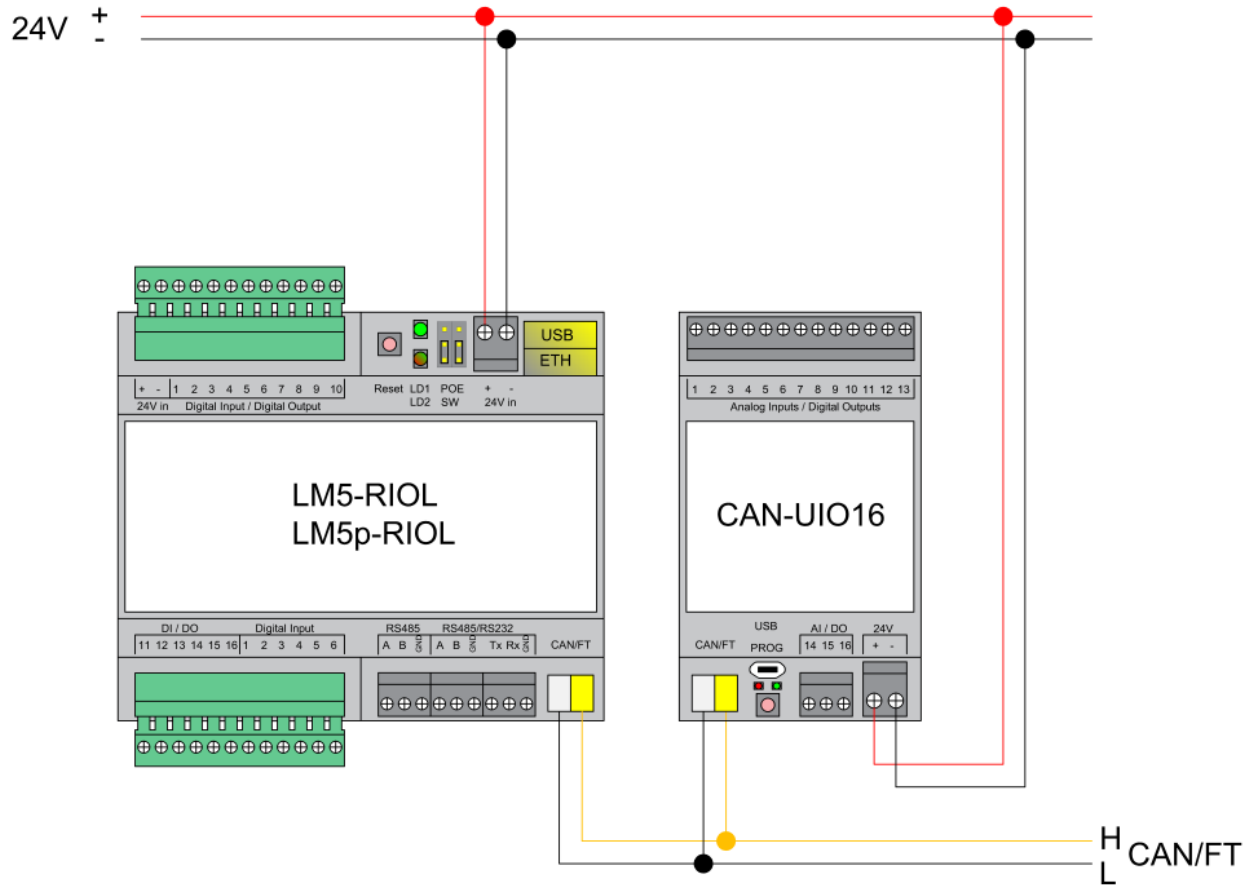
Digital / Analog input

Digital output (e.g. external contactor control)
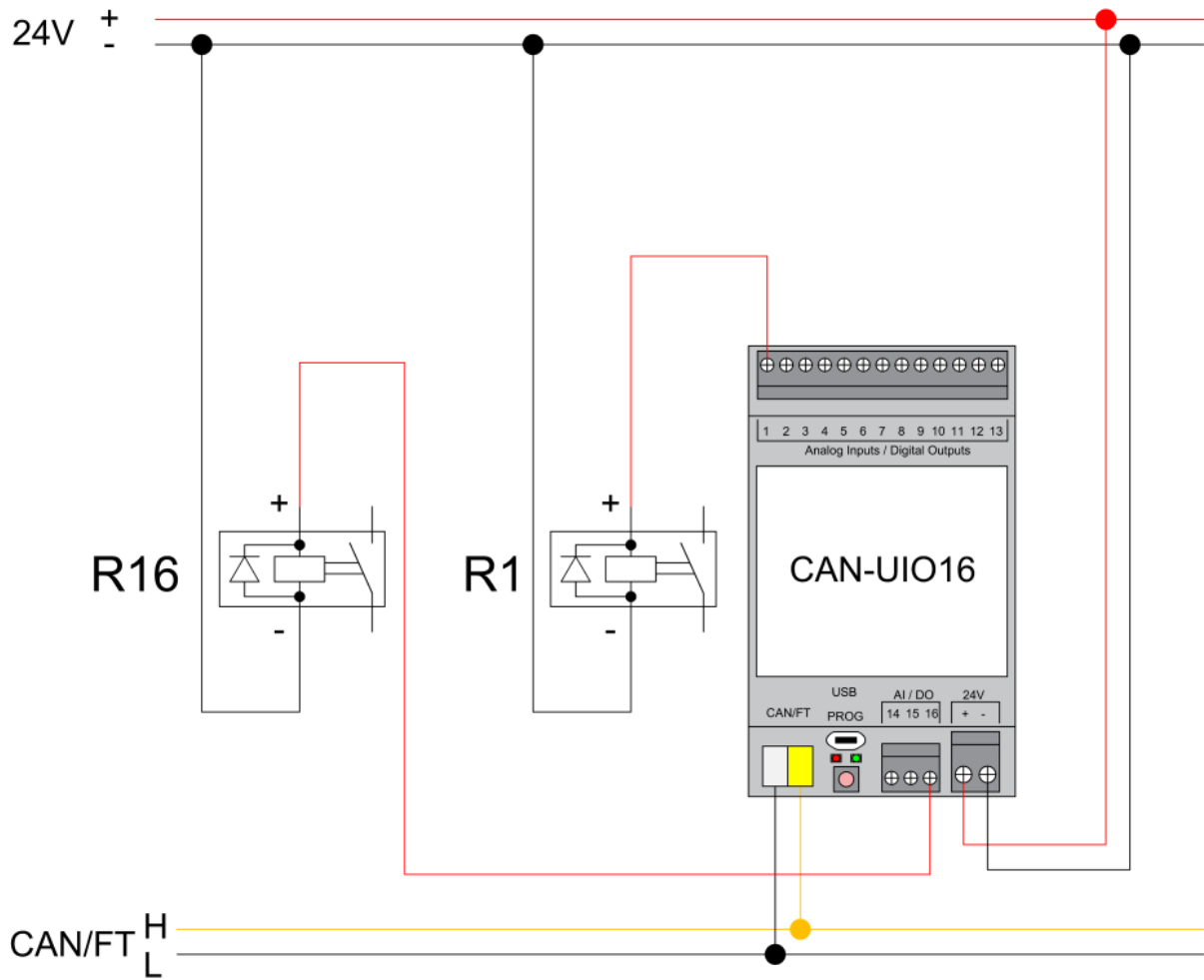
2. canX software settings

2.1. Digital output

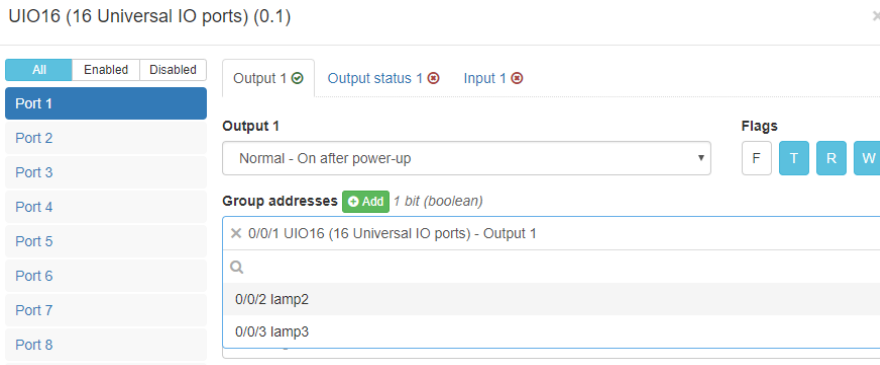**Default flags:** read (R), write (W), transmit (T)

Output mode:

Normal – Off after power-up

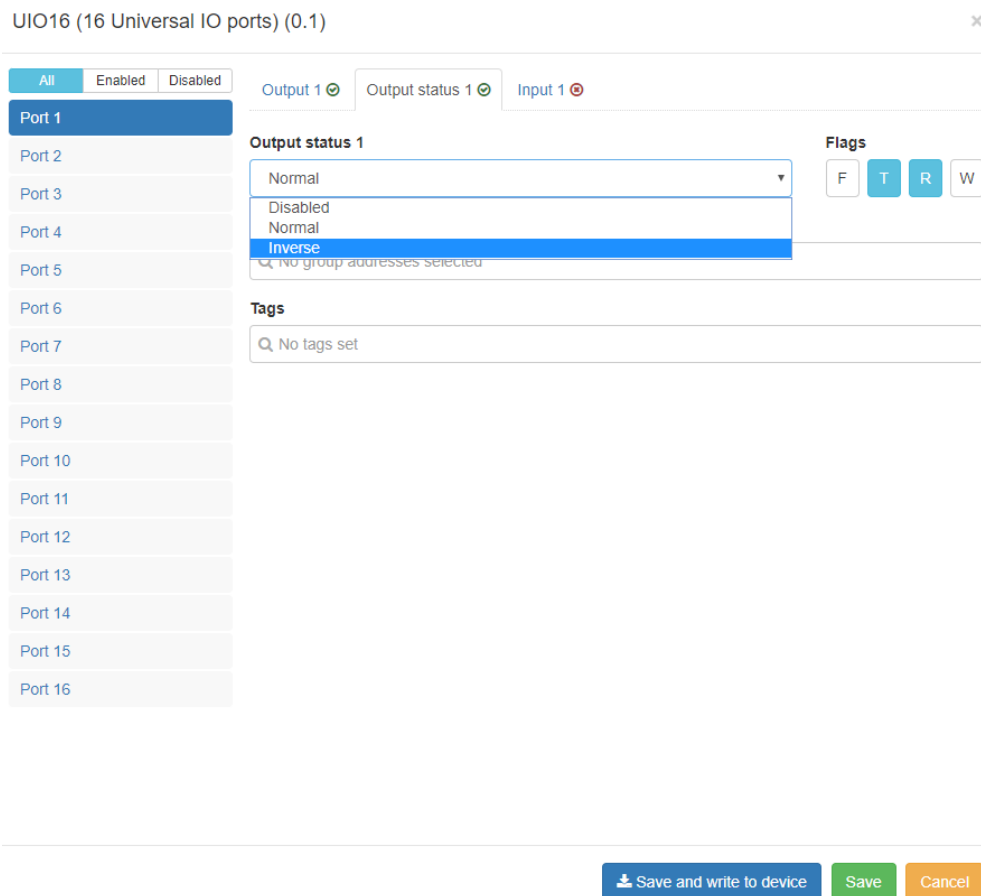Inverse – Off after power-up

Normal – On after power-up

Inverse – On after power-up

Group addresses – you can assign group addresses from the predefined list or add manually by clicking on ADD button. You can assign max 16 group addresses to one object / output.

2.2. Digital output status

Status (response after read command) will return a real measurement value (1 – for high voltage, 0 – for no voltage)

Default flags: read (R), transmit (T)

Output status: Disabled, Normal, Inverse

Group addresses – you can assign group addresses from the predefined list or add manually by clicking on ADD button. You can assign max 16 group addresses to one object / output status

2.3. Input mode

Default flags: read (R), write (W), transmit (T)

Input mode:

      Switch on/off – send 1 to bus if switched ON or 0 if switched OFF
      Switch off/on (inverse) – send 0 to bus if switched ON or 1 if switched OFF
   *Switch Toggle* - change status to inverted with every push

Button Toggle (optional long press) – change status to inverted with every push
Button On (optional long press) – push 1 to bus every pulse
Button Off (optional long press) – push 0 to bus every pulse
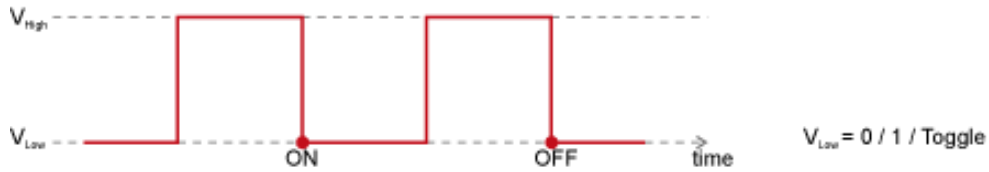
Button Start/Stop – send 1 when pushed and 0 when released
Button Stop/Start (inverse) – send 0 when pushed and 1 when released
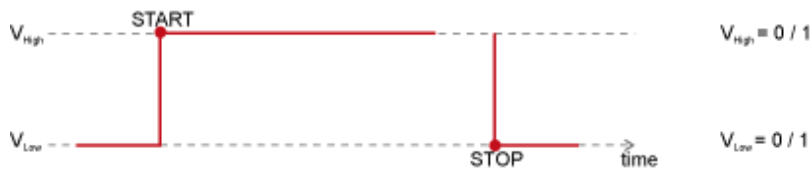
Button long press toggle - Send 0 or 1 to bus with every long press
Button long press send 1 - Send 1 with every long press
Button long press send 0 - Send 0 with every long press