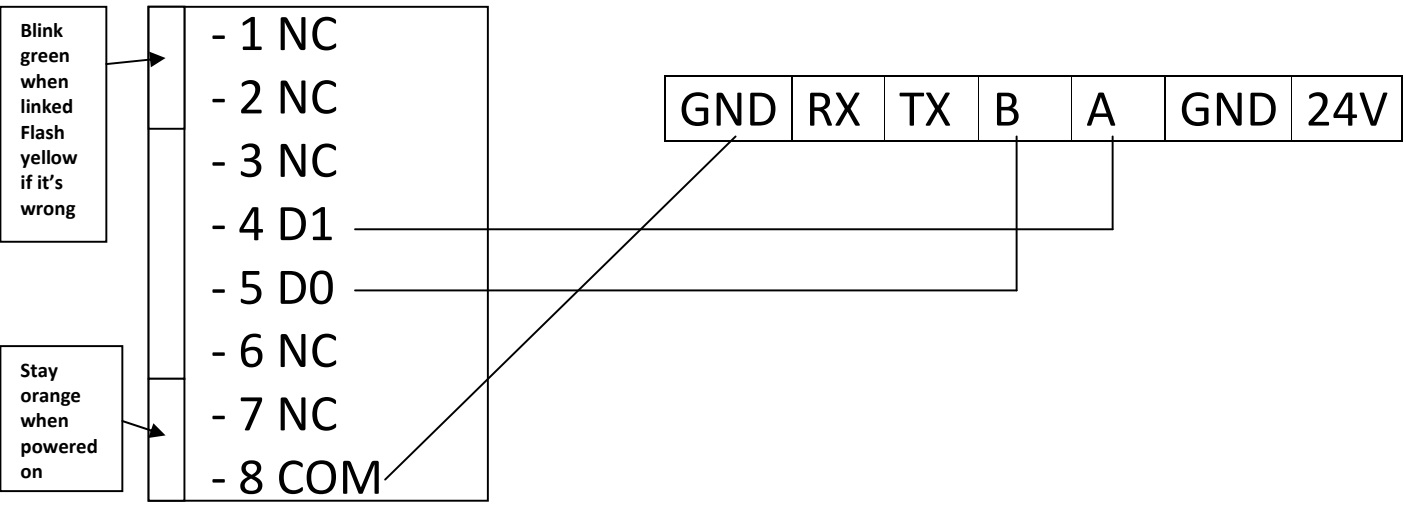


# MODBUS RTU between HMI COOLMAY MT6050H and ZELIO SR3

## 1-Wiring:

SR3MBU01BD module:

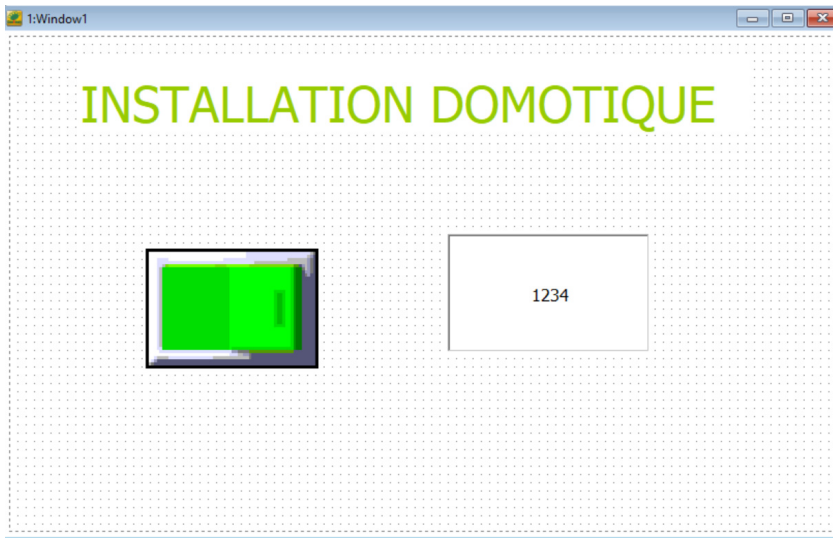
coolmay MT6050 connector (COM2):



So be carefull :

- COM to GND
- D1 to A
- D0 to B

## 2-Exemple of HMI design:



### Button settings:

Bit operation button



**Position**

Locked

Left: 132

Top: 206

**Property**

Wide: 167

High: 116

Font: 8X16

Align: Midd

**Control** | Outline | Text Set. | \*

**Register**

Chann conn: Link 1

Elem typ: 4x ?

Register4x: 16 . 0

**Function**

SetON  SetOFF

Keep type  Alternatin

Min.Press: 0.0 Sec

First Confirm

**Ctrl register**

Visibil cont

Write addr.and addr. differen

WriteToRegister0x: 0

**Protect**

Password

Grade: Ordinary

Confirm(Y) Cancel(N)

### Value display settings:

Reg attribute



**Position**

Locked

Backg trans

Left: 424

Top: 192

**Property**

Wide: 195

High: 114

Backg: [Color]

Prosp: [Color]

**Reg**

Chann conn: Link 1

Elem type: 4x ?

Register4x: 21

Data type: 16 Bit

Set permis  Signed  Zero lea

Password input/Sh

Direct upper li: 65535

IndirectMax4x

Direct lower li: 0

IndirectMin4x

**Set format**

Bit num: 4

Borde: 3D

Decimal: 0

Font: 8X16

Align: Midd

Grade: Ordinary

Password

NoticeSet...

**Ctrl reg**

Register0x: 0

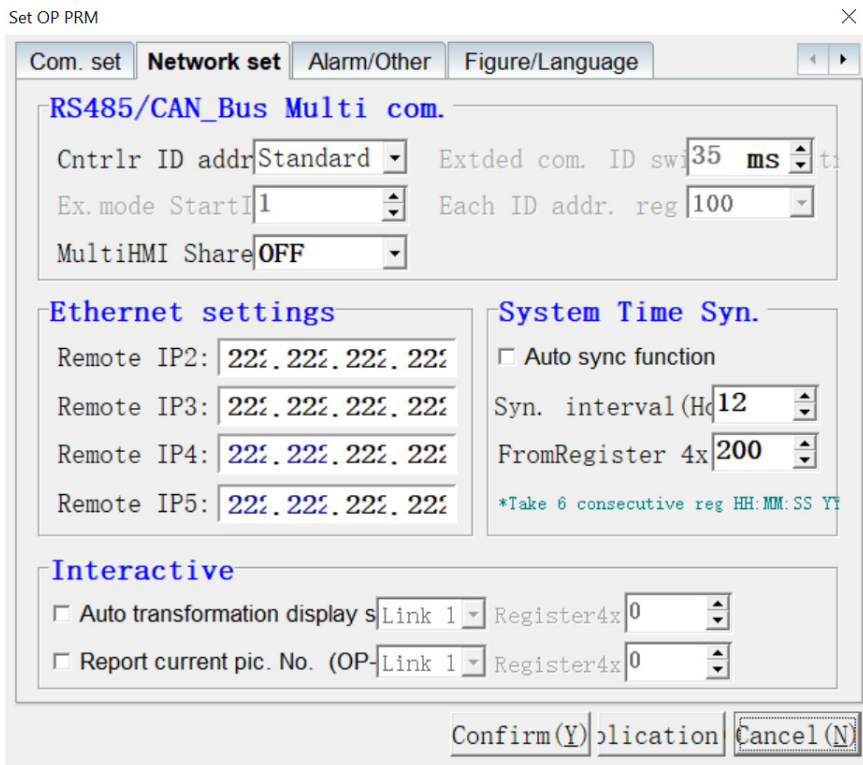
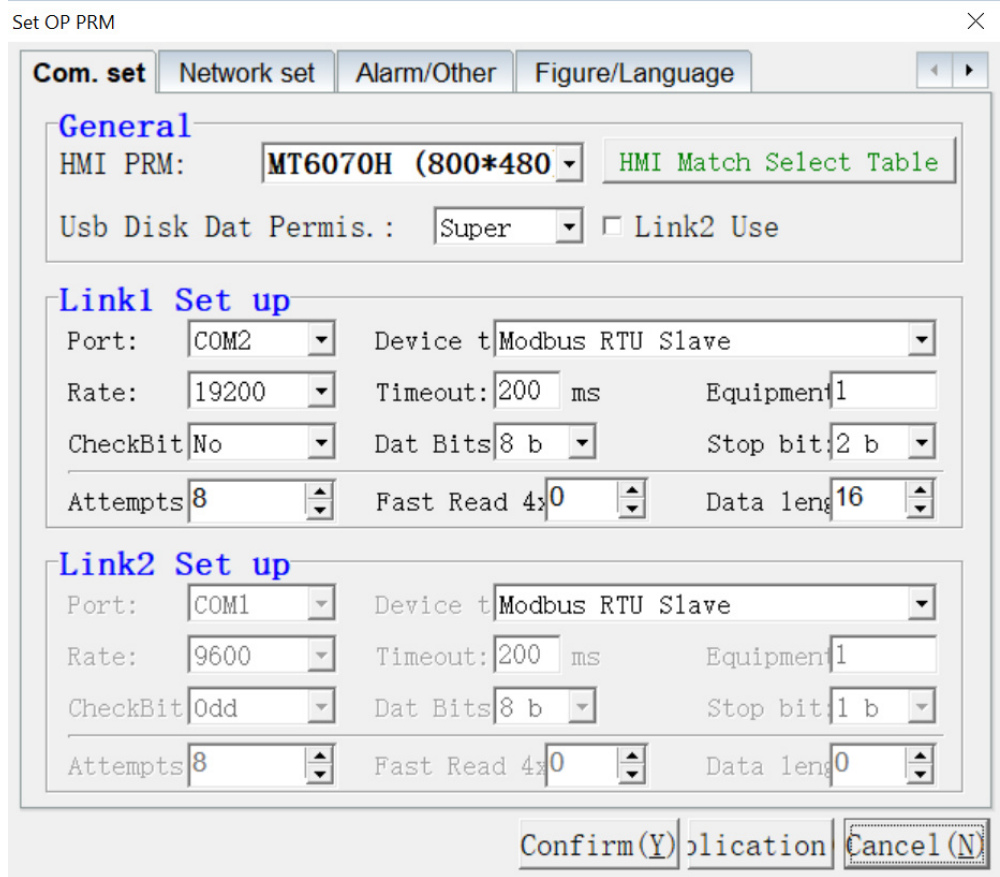
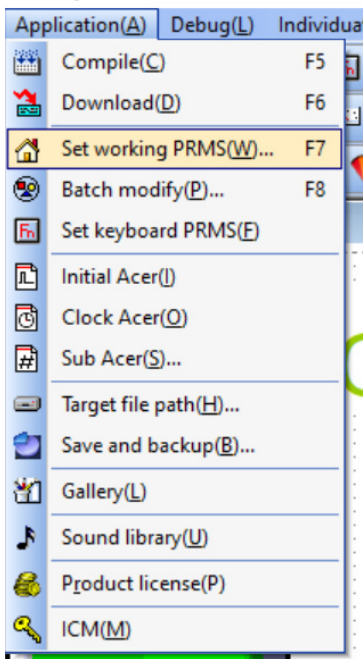
Ctrl fun: No Use

Cond exe: Show "\*\*\*\*"

Turn Color: [Color]

Confirm(Y) Cancel(N)

**Communication settings:**



It communicates with the slave (ZELIO PLC) via COM 2 on modbus RTU address 1, no parity, 8 bits, 2 bits stop

## 1.1 HMI as master and connected with only one slave settings:

### 1.1.1 Communication parameter settings

- 1) Open "Application --- Setting OP Parameters --- Communication Settings"
- 2) In the link1 and link2 settings are as below:

Communication port : When the product is HMI, select COM1 means using the RS232 port , and select COM2 means using the RS485 port. When the product is a HMI/PLC all-in-one, whether the RS232 port or the RS485 port is optional on the HMI, select COM2.

Device Type: Modbus RTU Slave

Communication speed, communication timeout, check bit, data bit, stop bit: according to your own communication needs, , the master and salve must be set as the same.

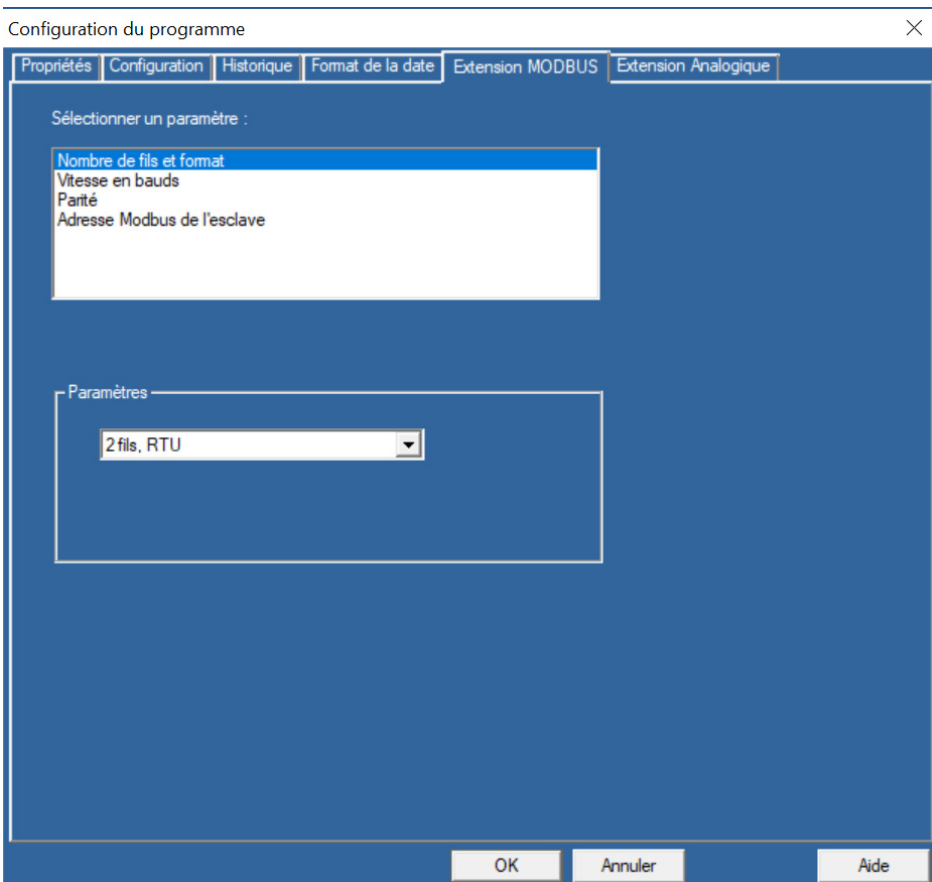
Device ID : The slave number to be read.

## 3-Exemple of program for ZELIO SR3B261BD:

### Module SR3MBU01BD settings:



Clic here or here



2 wires  
19200 bauds  
Parity none  
Address 1

Configuration du programme



Propriétés | Configuration | Historique | Format de la date | Extension MODBUS | Extension Analogique

Sélectionner un paramètre :

- Nombre de fils et format
- Vitesse en bauds
- Parité
- Adresse Modbus de l'esclave

Paramètres

19200

OK Annuler Aide

Configuration du programme



Propriétés | Configuration | Historique | Format de la date | Extension MODBUS | Extension Analogique

Sélectionner un paramètre :

- Nombre de fils et format
- Vitesse en bauds
- Parité
- Adresse Modbus de l'esclave

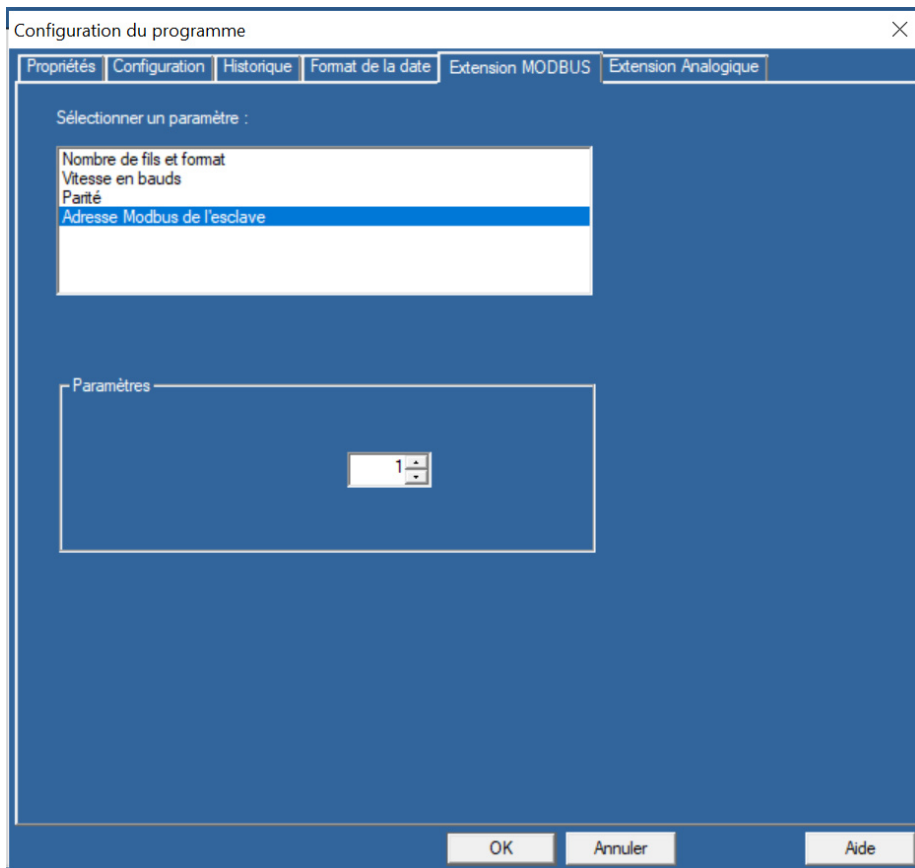
Paramètres

Aucune

Paire

Impaire

OK Annuler Aide



### **The program:**

Modbus registers used: (4 to read, 4 to write)

#### **Input registers:**

J1XT1: MW16 so 4x0016 with the HMI (no offset) and so on

J2XT1: MW17

J3XT1: MW18

J4XT1: MW19

#### **Output registers:**

O1XT1: MW20

O2XT1: MW21

O3XT1: MW22

O4XT1: MW23

The HMI switch control Q1 and the PLC send the value of 6666dec to the 4 output registers.

