# RS 485 MODULE

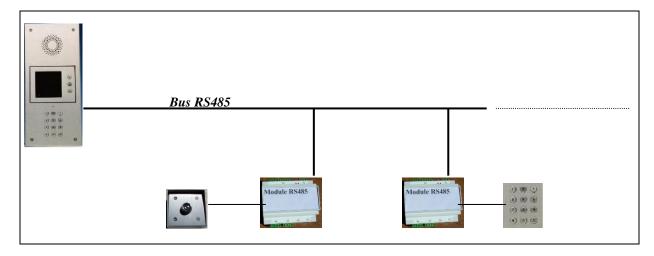
## **INSTALLATION and PROGRAMMING MANUAL**

### **CONTENTS**

\*\*\*\*\*

| 1 - PRESENTATION | 2 |
|------------------|---|
|                  |   |
| 2 – INSTALLATION | 2 |
|                  |   |
| 3 – PROGRAMMING  | 4 |
|                  |   |
| 4 - CONNECTIONS  | 9 |

#### 1 - PRESENTATION



RS 485 module is requested to connect additional items like keypads or badge-readers to Telacces 2 via RS 485 Bus. A RS 485 module can drive one keypad, two badge-readers or one keypad and one badge-reader.

RS 485 module controls two relays, a real clock with 5 time-zones, and can memorise up to 2 000 badge-codes and access-codes. A RS 485 module can drive 2 doors.

RS 485 module is delivered in an ABS box, 115 x 85 x 58 mm (DIN rail mounting possible).

A maximum of 16 RS 485 modules can be connected to one Telacces 2.

RS 485 module need 12VDC, 45mA (110mA when the both relays latched).

#### 2 - INSTALLATION

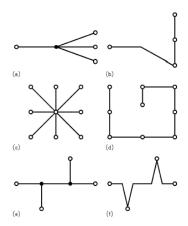
#### **Connections:**

- X1: six points for the two relays (drives each maximum 2A / 12VDC),
- X1: two points for exit-button on relay 1,
- X1: two points for exit-button on relay 2,
- X5 : four points for Dallas® reader,
- X6: four points for keypad or extra Dallas® reader, or MLP 3 from Noralsy,
- X7 : four points for RS 485 Bus,
- X2 : two points for power supply 12 V DC (if distance between module and Telacces 2 more than 40 meters).

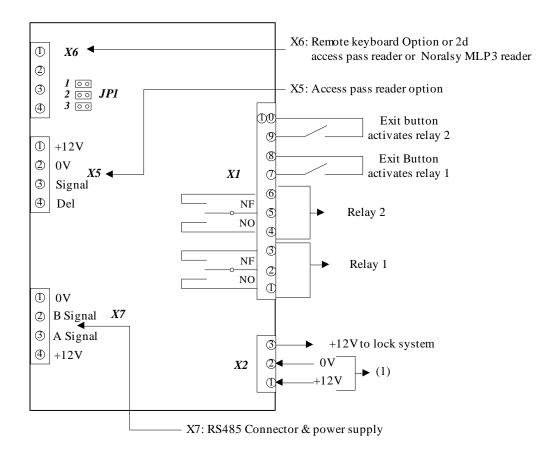
RS 485 module connects to terminal CN5 (RJ 45 connector) on a Telacces 2 using a CAT5E cable. Maximum distance between last RS 485 module and Telacces 2 is 1 000 m (using CAT5E cable).

Point 2 of X7 is B signal from RS 485 Bus; point 3 of X7 is A signal from RS485 Bus.

The following cabling topologies can all be used to connect RS 485 modules to each other. Topologies (b), (d) and (f) are recommended.



<u>Note</u>: if the RS 485 module is installed more than 40 meters from Telacces 2, 12 V DC power supply are requested for the module.



#### JP1:

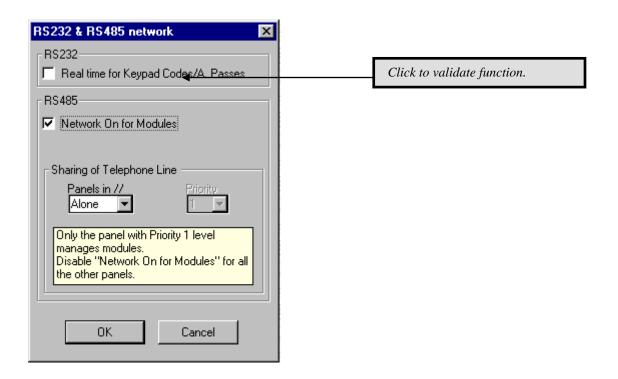
On 1, if a keypad connected to X6,

On 2, if a keypad and a badge-reader to X6,

On 3, if only a badge-reader connected to X6.

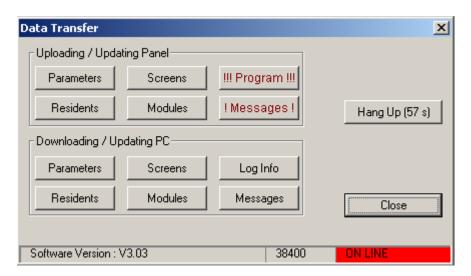
#### 3 - PROGRAMMING

Programming of RS485 module is done via RS485 Bus. **IMPORTANT!**: necessary first to activate RS485 Bus.

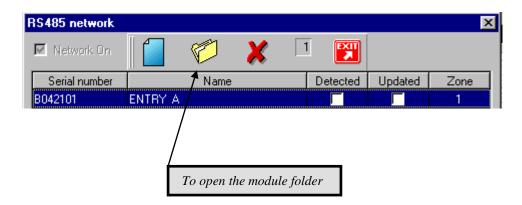


Don't forget to send new programming to TELACCES 2.

At first connection, RS 485 module(s) send information to Telacces 2. To program RS 485 module(s), first read all of them by clicking « Downloading Modules » in the Updating PC page.

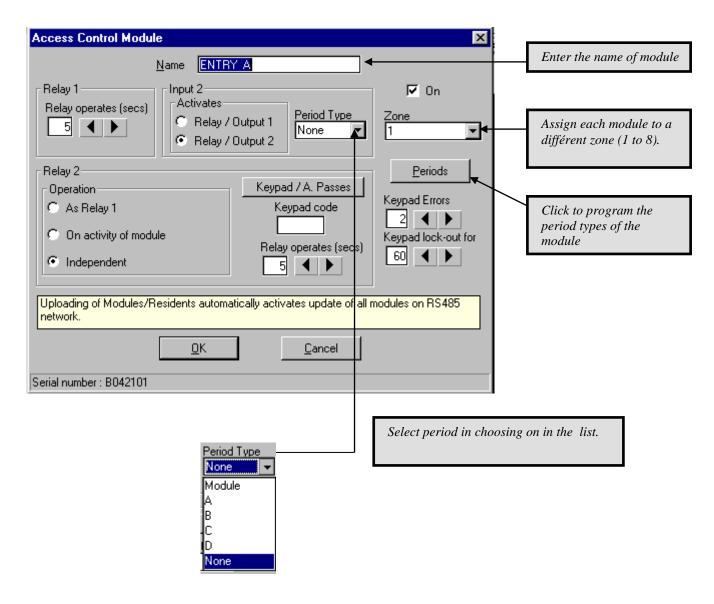


Back in the page « RS 485 network ». The RS 485 modules now appears on the screen. Highlight the module to program and click on Open.



A new page named « Access Control Module » is now opened.

IMPORTANT!: don't forget to tick «On» to allow using of this module.



There are 8 Zones which are used to differentiate and authorise/restrict access as required.

#### For example:

Door A (Parking access) associated with Zone 1,

Door B (Technical room) associated with Zone 2,

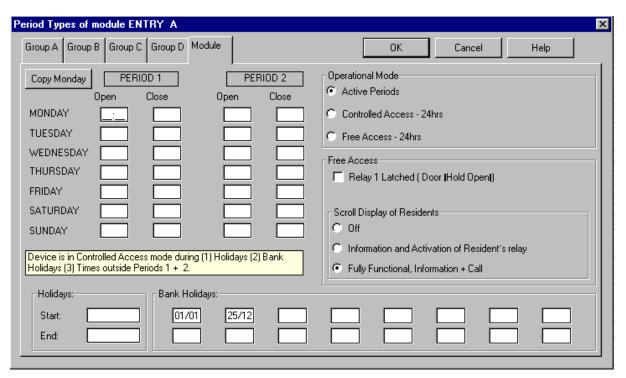
Door C (Garden access) associated with Zone 1.

If the resident is authorised for Zone 1, that means door A (Parking) and door C (garden).

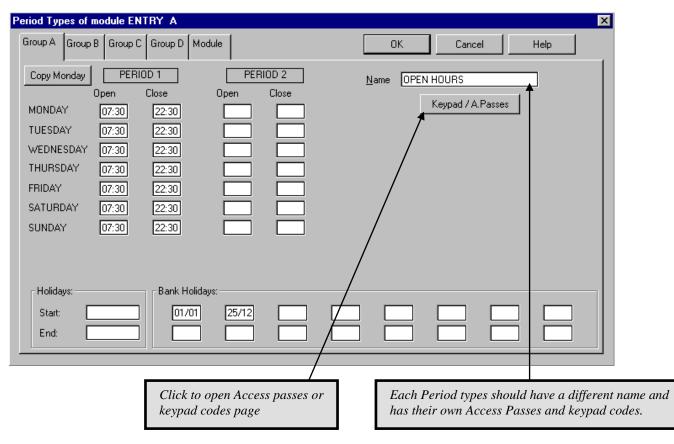
5 Time Zones are available for RS 485 modules : A, B, C, D and Module.

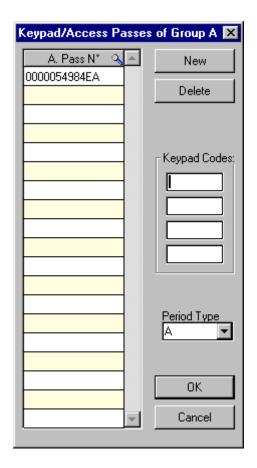
Note: Telacces 2 is no part of any of these 5 Time Zones.

Time Zone type « Module »

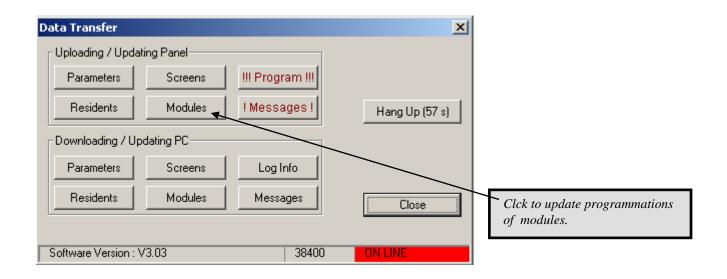


For Time Zones A, B, C and D, it is necessary to enter the relevant keypad access-codes or access-badges serial numbers.





Now necessary to upload new modules programmation to Telacces 2 by clicking « Modules » in the window Upload.



#### Note:

It is not possible to connect any RS 485 module to a Telacces 2 equiped with option extra 64 call-buttons.

## 4 - CONNECTONS

| Terminals | Points (*) | Function                                   |  |
|-----------|------------|--|--|
| X2        | 2          | +12VDC if external power supply required   |  |
|           | 3          | 0V   |  |
|           | 4          | +12VDC for lock system                     |  |
| XI        | 8          | Relay 1 (NO in 8 & 9, NC in 9 & 10)        |  |
|           | 9          |  |  |
|           | 10         |  |  |
|           | 11         | Relay 2 (NO in 11 & 12, NC in 12 & 13)     |  |
|           | 12         |  |  |
|           | 13         |  |  |
|           | 14         | Enit Dutton formular 1                     |  |
|           | 15         | Exit Button for relay 1                    |  |
|           | 16         | Exit Button for relay 2                    |  |
|           | 17         | Exit Button for feray 2                    |  |
| X7        | 20         | +12VDC                                     |  |
|           | 21         | A Signal (RS485)                           |  |
|           | 22         | B Signal (RS485)                           |  |
|           | 23         | 0V   |  |
| X5        | 27         | Del  |  |
|           | 28         | Signal                                     |  |
|           | 29         | 0V   |  |
|           | 30         | +12VDC                                     |  |
| X6        | 32         | Del (for badges reader), unused for keypad |  |
|           | 33         | Signal                                     |  |
|           | 34         | 0V   |  |
|           | 35         | +12VDC                                     |  |