



# TFT90x

## USER MANUAL

Rev.01

Firmware version 1.2.85 and later

### ORDERING INFORMATION

| DISPLAY CODE | TYPE                            |
|--------------|---------------------------------|
| TFT901-A-3   | PARALLEL INPUTS AND VEGA SERIAL |
| TFT902-A-3   | PARALLEL INPUTS AND CAN         |
| TFT903-A-3   | PARALLEL INPUTS AND RS485       |

\*The number after the A of the code indicates glass thickness on mm

### OPTIONAL ITEMS

| DESCRIPTION                     | CODE                    |
|---------------------------------|-------------------------|
| Stand-alone NO kit              | KIT-AUTONOMO-NO         |
| Micro SD card industrial 4GB*   | MICRO SDCARD-4G-SLC-IND |
| Micro USB M-USB F adapter cable | CB.MICRO.USB.M-USB.A.F  |
| USB stick 32GB                  | USB-STICK-32GB-KGN**    |

\*The micro SD card is used only to transfer projects from the Sirio editor to the display and, after the transfer, it can be removed from the device unless the project was created with the second audio language or background music function activated. In the above cases, the micro SD card cannot be removed.

\*\*The USB stick can be used to transfer projects from the Sirio editor to the display. For projects with second audio language or background music, please use the micro SD card.

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## 1 TECHNICAL DATA

|                             |                             |              |
|-----------------------------|-----------------------------|--------------|
| Screen                      | 9"                          |              |
| Resolution                  | 800 (RGB) x480              |              |
| Display Area                | 198 mm x 111mm              |              |
| Colors                      | 16M                         |              |
| Pixel                       | 0.24 x 0.23 [mm^2]          |              |
| Power Supply Voltage        | 12÷24 Vdc±10%               |              |
| Maximum current consumption | 400 mA                      |              |
| Operating temperature       | -5°C/+40°C                  | +23 F/+104 F |
| Micro SD card               | Optional                    |              |
| Images format               | *.bmp, *.jpg, *.jpeg, *.png |              |
| Life (100% brightness)      | 20.000 hours                |              |
| Viewing Angle               | 12 o'clock                  |              |
| Brightness                  | 350 cd/m <sup>2</sup>       |              |
| Input signals activation    | See par.3.1                 |              |

## 2 WORKING MODE

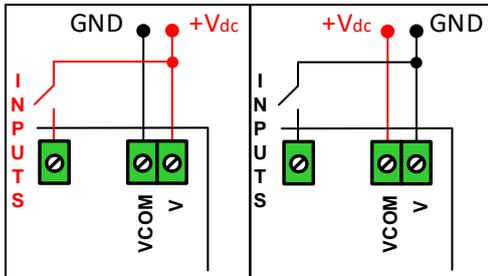
| Display           | Description  | Nmax floors (default range) |
|-------------------|--|-----------------------------|
| 1 WIRE            | <b>1 wire per floor</b> , each input (1-16) activates a floor      | 16 (0,15)                   |
| BINARY            | The inputs (1-6) encode the floor number in <b>binary</b>          | 64 (0,63)                   |
| INVERTED BINARY   | The inputs (1-6) encode the floor number in <b>inverted binary</b> | 64 (0,63)                   |
| BCD               | The inputs (1-6) encode the floor number in <b>BCD</b>             | 29 (-9,19)                  |
| GRAY              | The inputs (1-6) encode the floor number in <b>GRAY</b>            | 64 (0,63)                   |
| 7 SEG             | <b>Seven segments</b> inputs                                       | -9, 29                      |
| Stand alone NO    | Stand-alone display mode (with magnetic NO sensors)                | 64 (-9,54)                  |
| Stand alone NC    | Stand-alone display mode (with magnetic NC sensors)                | 64 (-9,54)                  |
| Serial V (TFT901) | Vega Serial  |                             |
| CAN (TFT902)      | CAN Proprietary Protocols  |                             |
| RS485 (TFT903)    | RS485 Proprietary Protocols  |                             |
| DEMO              | Lift virtual simulation with floors, arrows and alarms             | 16 (0,15)                   |
| DEMO 2            | Lift virtual simulation. Each input corresponds to a car call.     | 16 (0,15)                   |

### 3 DISCRETE WIRING WORKING MODES

Below we refer to discrete wiring modes by talking about the following working modes: 1 Wire, Binary, Inverted binary, Gray, BCD, 7 segments, Stand alone.

#### 3.1 COMMON ANODE OR COMMON CATHODE MODE

In discrete wirings modes (1 Wire per floor, Binary, Inverted binary, Gray, BCD, 7 segments, Stand alone), the display can work in **common anode mode** or **common cathode mode** depending on the power wires connection. See the following diagram:



#### INPUTS ACTIVATION

- To activate the inputs by + V, connect  $V = + V$ ,  $V_{com} = GND$ .
- To activate the inputs by GND, connect  $V = GND$ ,  $V_{com} = + V$ .

#### 3.2 PINOUT

| PIN  | DESCRIPTION         | ICON*   | ALARM N.** |
|------|---------------------|---|------------|
| 1-16 | Position indication |   |            |
| DW   | Down arrow          |   |            |
| UP   | Up arrow            |  |            |
| AA   | Alarm               |  | 2          |
| AR   | Communication       |  | 3          |
| S1   | Maintenance         |  | 5          |
| S2   | Fire                |  | 6          |
| S3   | Reserved            |  | 8          |
| S4   | Out of service      |  | 10         |
| S5   | Overload            |  | 1          |
| GN   | GONG                |   |            |

\*Messages and icons can be edited using the SIRIO EDITOR software

\*\* Lift state number in the SIRIO EDITOR software



| Binary | Inv. Binary | Display inputs |     |     |     |     |     | Binary | Inv. Binary | Display inputs |     |     |     |     |     |
|--------|-------------|----------------|-----|-----|-----|-----|-----|--------|-------------|----------------|-----|-----|-----|-----|-----|
|        |             | 1              | 2   | 3   | 4   | 5   | 6   |        |             | 1              | 2   | 3   | 4   | 5   | 6   |
| 0      | 63          | OFF            | OFF | OFF | OFF | OFF | OFF | 32     | 31          | OFF            | OFF | OFF | OFF | OFF | OFF |
| 1      | 62          | ON             | OFF | OFF | OFF | OFF | OFF | 33     | 30          | ON             | OFF | OFF | OFF | OFF | OFF |
| 2      | 61          | OFF            | ON  | OFF | OFF | OFF | OFF | 34     | 29          | OFF            | ON  | OFF | OFF | OFF | OFF |
| 3      | 60          | ON             | ON  | OFF | OFF | OFF | OFF | 35     | 28          | ON             | ON  | OFF | OFF | OFF | OFF |
| 4      | 59          | OFF            | OFF | ON  | OFF | OFF | OFF | 36     | 27          | OFF            | OFF | ON  | OFF | OFF | OFF |
| 5      | 58          | ON             | OFF | ON  | OFF | OFF | OFF | 37     | 26          | ON             | OFF | ON  | OFF | OFF | OFF |
| 6      | 57          | OFF            | ON  | ON  | OFF | OFF | OFF | 38     | 25          | OFF            | ON  | ON  | OFF | OFF | OFF |
| 7      | 56          | ON             | ON  | ON  | OFF | OFF | OFF | 39     | 24          | ON             | ON  | ON  | OFF | OFF | OFF |
| 8      | 55          | OFF            | OFF | OFF | ON  | OFF | OFF | 40     | 23          | OFF            | OFF | OFF | ON  | OFF | OFF |
| 9      | 54          | ON             | OFF | OFF | ON  | OFF | OFF | 41     | 22          | ON             | OFF | OFF | ON  | OFF | OFF |
| 10     | 53          | OFF            | ON  | OFF | ON  | OFF | OFF | 42     | 21          | OFF            | ON  | OFF | ON  | OFF | OFF |
| 11     | 52          | ON             | ON  | OFF | ON  | OFF | OFF | 43     | 20          | ON             | ON  | OFF | ON  | OFF | OFF |
| 12     | 51          | OFF            | OFF | ON  | ON  | OFF | OFF | 44     | 19          | OFF            | OFF | ON  | ON  | OFF | OFF |
| 13     | 50          | ON             | OFF | ON  | ON  | OFF | OFF | 45     | 18          | ON             | OFF | ON  | ON  | OFF | OFF |
| 14     | 49          | OFF            | ON  | ON  | ON  | OFF | OFF | 46     | 17          | OFF            | ON  | ON  | ON  | OFF | OFF |
| 15     | 48          | ON             | ON  | ON  | ON  | OFF | OFF | 47     | 16          | ON             | ON  | ON  | ON  | OFF | OFF |
| 16     | 47          | OFF            | OFF | OFF | OFF | ON  | OFF | 48     | 15          | OFF            | OFF | OFF | OFF | ON  | ON  |
| 17     | 46          | ON             | OFF | OFF | OFF | ON  | OFF | 49     | 14          | ON             | OFF | OFF | OFF | ON  | ON  |
| 18     | 45          | OFF            | ON  | OFF | OFF | ON  | OFF | 50     | 13          | OFF            | ON  | OFF | OFF | ON  | ON  |
| 19     | 44          | ON             | ON  | OFF | OFF | ON  | OFF | 51     | 12          | ON             | ON  | OFF | OFF | ON  | ON  |
| 20     | 43          | OFF            | OFF | ON  | OFF | ON  | OFF | 52     | 11          | OFF            | OFF | ON  | OFF | ON  | ON  |
| 21     | 42          | ON             | OFF | ON  | OFF | ON  | OFF | 53     | 10          | ON             | OFF | ON  | OFF | ON  | ON  |
| 22     | 41          | OFF            | ON  | ON  | OFF | ON  | OFF | 54     | 9           | OFF            | ON  | ON  | OFF | ON  | ON  |
| 23     | 40          | ON             | ON  | ON  | OFF | ON  | OFF | 55     | 8           | ON             | ON  | ON  | OFF | ON  | ON  |
| 24     | 39          | OFF            | OFF | OFF | ON  | ON  | OFF | 56     | 7           | OFF            | OFF | OFF | ON  | ON  | ON  |
| 25     | 38          | ON             | OFF | OFF | ON  | ON  | OFF | 57     | 6           | ON             | OFF | OFF | ON  | ON  | ON  |
| 26     | 37          | OFF            | ON  | OFF | ON  | ON  | OFF | 58     | 5           | OFF            | ON  | OFF | ON  | ON  | ON  |
| 27     | 36          | ON             | ON  | OFF | ON  | ON  | OFF | 59     | 4           | ON             | ON  | OFF | ON  | ON  | ON  |
| 28     | 35          | OFF            | OFF | ON  | ON  | ON  | OFF | 60     | 3           | OFF            | OFF | ON  | ON  | ON  | ON  |
| 29     | 34          | ON             | OFF | ON  | ON  | ON  | OFF | 61     | 2           | ON             | OFF | ON  | ON  | ON  | ON  |
| 30     | 33          | OFF            | ON  | ON  | ON  | ON  | OFF | 62     | 1           | OFF            | ON  | ON  | ON  | ON  | ON  |
| 31     | 32          | ON             | ON  | ON  | ON  | ON  | OFF | 63     | 0           | ON             | ON  | ON  | ON  | ON  | ON  |

The table refers to a display with the parameter **2.1 SET FIRST FLOOR = 0**, the position indication can be shifted by changing this value.

| BCD | Display inputs |     |     |     |     |
|-----|----------------|-----|-----|-----|-----|
|     | 1              | 2   | 3   | 4   | 5   |
| 0   | ON             | ON  | ON  | ON  | OFF |
| 1   | OFF            | ON  | ON  | ON  | OFF |
| 2   | ON             | OFF | ON  | ON  | OFF |
| 3   | OFF            | OFF | ON  | ON  | OFF |
| 4   | ON             | ON  | OFF | ON  | OFF |
| 5   | OFF            | ON  | OFF | ON  | OFF |
| 6   | ON             | OFF | OFF | ON  | OFF |
| 7   | OFF            | OFF | OFF | ON  | OFF |
| 8   | ON             | ON  | ON  | OFF | OFF |
| 9   | OFF            | ON  | ON  | OFF | OFF |

| BCD | Display inputs |     |     |     |    |
|-----|----------------|-----|-----|-----|----|
|     | 1              | 2   | 3   | 4   | 5  |
| 10  | ON             | ON  | ON  | ON  | ON |
| 11  | OFF            | ON  | ON  | ON  | ON |
| 12  | ON             | OFF | ON  | ON  | ON |
| 13  | OFF            | OFF | ON  | ON  | ON |
| 14  | ON             | ON  | OFF | ON  | ON |
| 15  | OFF            | ON  | OFF | ON  | ON |
| 16  | ON             | OFF | OFF | ON  | ON |
| 17  | OFF            | OFF | OFF | ON  | ON |
| 18  | ON             | ON  | ON  | OFF | ON |
| 19  | OFF            | ON  | ON  | OFF | ON |

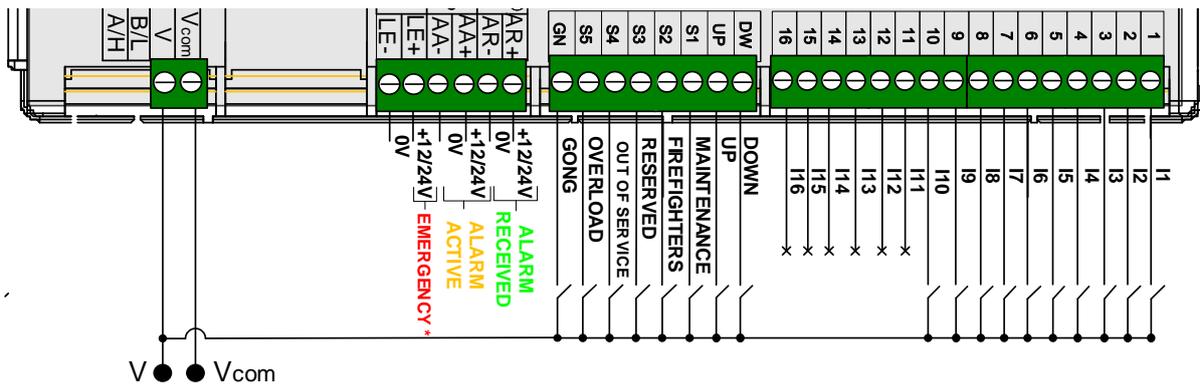
**IMPORTANT:** to use BCD, set the parameter **2.1 SET FIRST FLOOR = 0**. The input I6 activates the minus sign. If the inputs I5 and I6 are both ON, only the tens will be displayed.

| Gray | Display inputs |     |     |     |     |     | Gray | Display inputs |     |     |     |     |    |
|------|----------------|-----|-----|-----|-----|-----|------|----------------|-----|-----|-----|-----|----|
|      | 1              | 2   | 3   | 4   | 5   | 6   |      | 1              | 2   | 3   | 4   | 5   | 6  |
| 0    | OFF            | OFF | OFF | OFF | OFF | OFF | 32   | OFF            | OFF | OFF | OFF | ON  | ON |
| 1    | ON             | OFF | OFF | OFF | OFF | OFF | 33   | ON             | OFF | OFF | OFF | ON  | ON |
| 2    | ON             | ON  | OFF | OFF | OFF | OFF | 34   | ON             | ON  | OFF | OFF | ON  | ON |
| 3    | OFF            | ON  | OFF | OFF | OFF | OFF | 35   | OFF            | ON  | OFF | OFF | ON  | ON |
| 4    | OFF            | ON  | ON  | OFF | OFF | OFF | 36   | OFF            | ON  | ON  | OFF | ON  | ON |
| 5    | ON             | ON  | ON  | OFF | OFF | OFF | 37   | ON             | ON  | ON  | OFF | ON  | ON |
| 6    | ON             | OFF | ON  | OFF | OFF | OFF | 38   | ON             | OFF | ON  | OFF | ON  | ON |
| 7    | OFF            | OFF | ON  | OFF | OFF | OFF | 39   | OFF            | OFF | ON  | OFF | ON  | ON |
| 8    | OFF            | OFF | ON  | ON  | OFF | OFF | 40   | OFF            | OFF | ON  | ON  | ON  | ON |
| 9    | ON             | OFF | ON  | ON  | OFF | OFF | 41   | ON             | OFF | ON  | ON  | ON  | ON |
| 10   | ON             | ON  | ON  | ON  | OFF | OFF | 42   | ON             | ON  | ON  | ON  | ON  | ON |
| 11   | OFF            | ON  | ON  | ON  | OFF | OFF | 43   | OFF            | ON  | ON  | ON  | ON  | ON |
| 12   | OFF            | ON  | OFF | ON  | OFF | OFF | 44   | OFF            | ON  | OFF | ON  | ON  | ON |
| 13   | ON             | ON  | OFF | ON  | OFF | OFF | 45   | ON             | ON  | OFF | ON  | ON  | ON |
| 14   | ON             | OFF | OFF | ON  | OFF | OFF | 46   | ON             | OFF | OFF | ON  | ON  | ON |
| 15   | OFF            | OFF | OFF | ON  | OFF | OFF | 47   | OFF            | OFF | OFF | ON  | ON  | ON |
| 16   | OFF            | OFF | OFF | ON  | ON  | OFF | 48   | OFF            | OFF | OFF | ON  | OFF | ON |
| 17   | ON             | OFF | OFF | ON  | ON  | OFF | 49   | ON             | OFF | OFF | ON  | OFF | ON |
| 18   | ON             | ON  | OFF | ON  | ON  | OFF | 50   | ON             | ON  | OFF | ON  | OFF | ON |
| 19   | OFF            | ON  | OFF | ON  | ON  | OFF | 51   | OFF            | ON  | OFF | ON  | OFF | ON |
| 20   | OFF            | ON  | ON  | ON  | ON  | OFF | 52   | OFF            | ON  | ON  | ON  | OFF | ON |
| 21   | ON             | ON  | ON  | ON  | ON  | OFF | 53   | ON             | ON  | ON  | ON  | OFF | ON |
| 22   | ON             | OFF | ON  | ON  | ON  | OFF | 54   | ON             | OFF | ON  | ON  | OFF | ON |
| 23   | OFF            | OFF | ON  | ON  | ON  | OFF | 55   | OFF            | OFF | ON  | ON  | OFF | ON |
| 24   | OFF            | OFF | ON  | OFF | ON  | OFF | 56   | OFF            | OFF | ON  | OFF | OFF | ON |
| 25   | ON             | OFF | ON  | OFF | ON  | OFF | 57   | ON             | OFF | ON  | OFF | OFF | ON |
| 26   | ON             | ON  | ON  | OFF | ON  | OFF | 58   | ON             | ON  | ON  | OFF | OFF | ON |
| 27   | OFF            | ON  | ON  | OFF | ON  | OFF | 59   | OFF            | ON  | ON  | OFF | OFF | ON |
| 28   | OFF            | ON  | OFF | OFF | ON  | OFF | 60   | OFF            | ON  | OFF | OFF | OFF | ON |
| 29   | ON             | ON  | OFF | OFF | ON  | OFF | 61   | ON             | ON  | OFF | OFF | OFF | ON |
| 30   | ON             | OFF | OFF | OFF | ON  | OFF | 62   | ON             | OFF | OFF | OFF | OFF | ON |
| 31   | OFF            | OFF | OFF | OFF | ON  | OFF | 63   | OFF            | OFF | OFF | OFF | OFF | ON |

The table refers to a display with the parameter **2.1 SET FIRST FLOOR = 0**, the position indication can be shifted by changing this value.

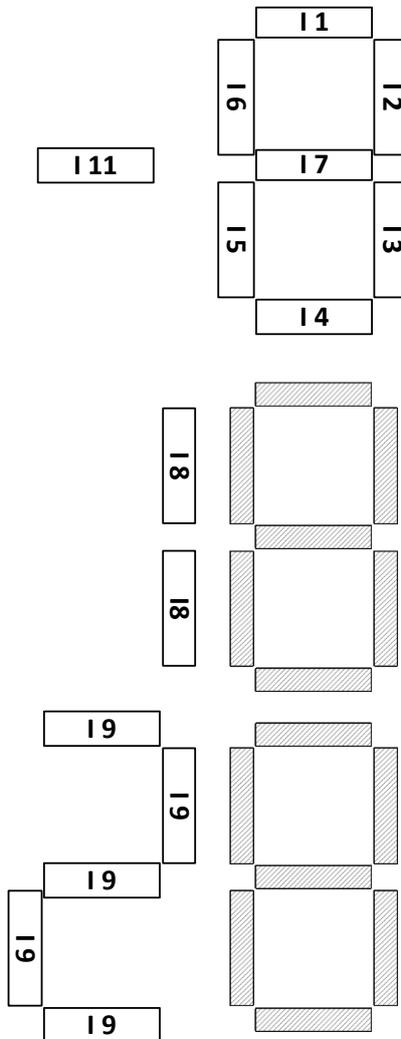
### 3.5 7 SEGMENTS

The 7 SEGMENT coding can be activated by setting **1.2 SET MODE= 7 SEG**, this working mode is available from the version 1.x.105.



- $V=GND$   $V_{com}=+V_{dc}$  → common anode, Input activation: GND;
- $V=+V_{dc}$   $V_{com}=GND$  → common cathode, Input activation: +Vdc;

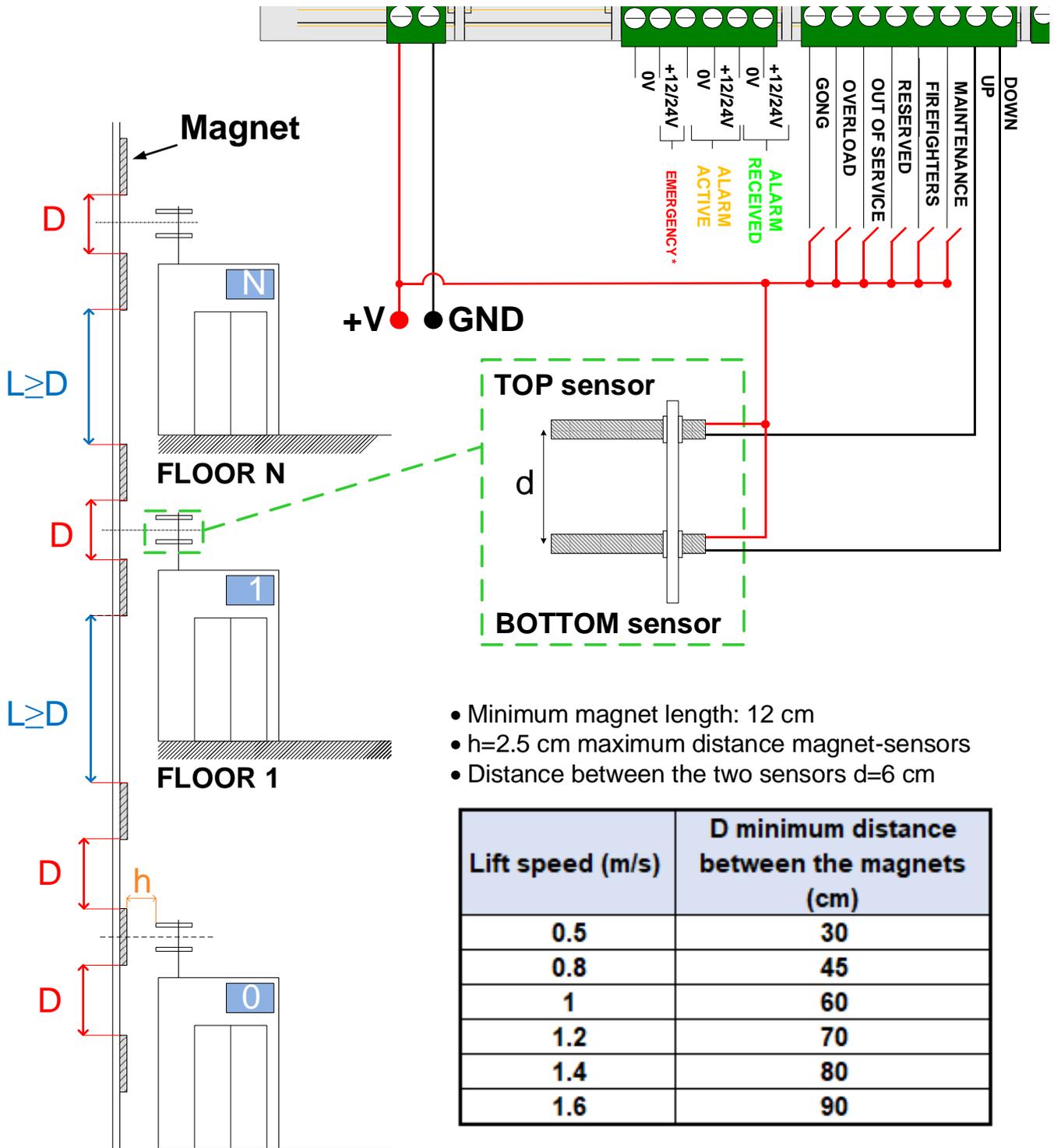
(\*) The emergency icon with the courtesy light is activated through a positive (LE+), the pin LE- is the display GND



The input of the left digit (18 for the ten or 19 for twenty) and the minus sign (I11) can be activated at the same time.

### 3.6 STAND ALONE

The STAND ALONE modes can be activated by setting **1.2 SET MODE = STAND ALONE NO** if you use normally open sensors or **STAND ALONE NC** if you use normally closed sensors. The elevator speed must be between the following values:  $V_{min} = 0.4 \text{ m / s}$  -  $V_{MAX} = 2 \text{ m / s}$ .

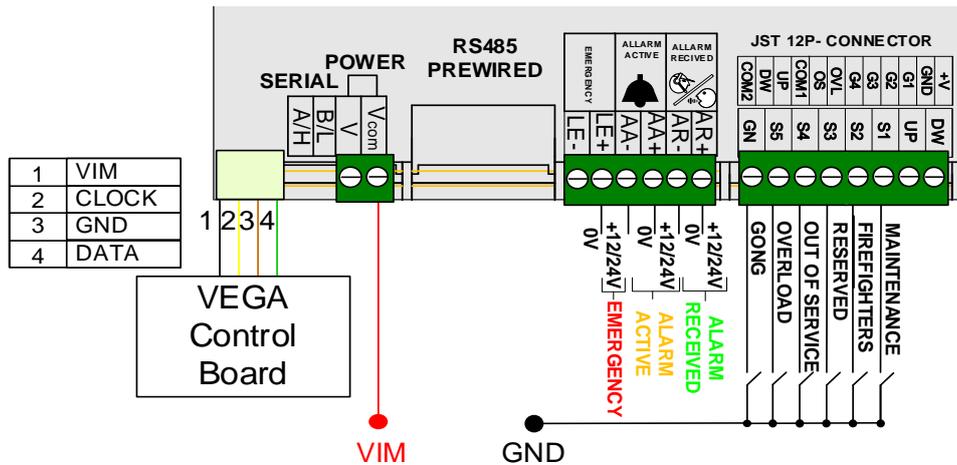


#### FLOOR 0 SYNCRONIZING

N.B. The synchronizing floor is the only one with three magnets, the central magnet is placed in front of both the sensors. The other floors only have one magnet above the TOP sensor and another under the BOTTOM sensor. The value of the synchronizing floor can be changed by the param 2.1 SET FIRST FLOOR

## 4 SERIAL WORKING MODES

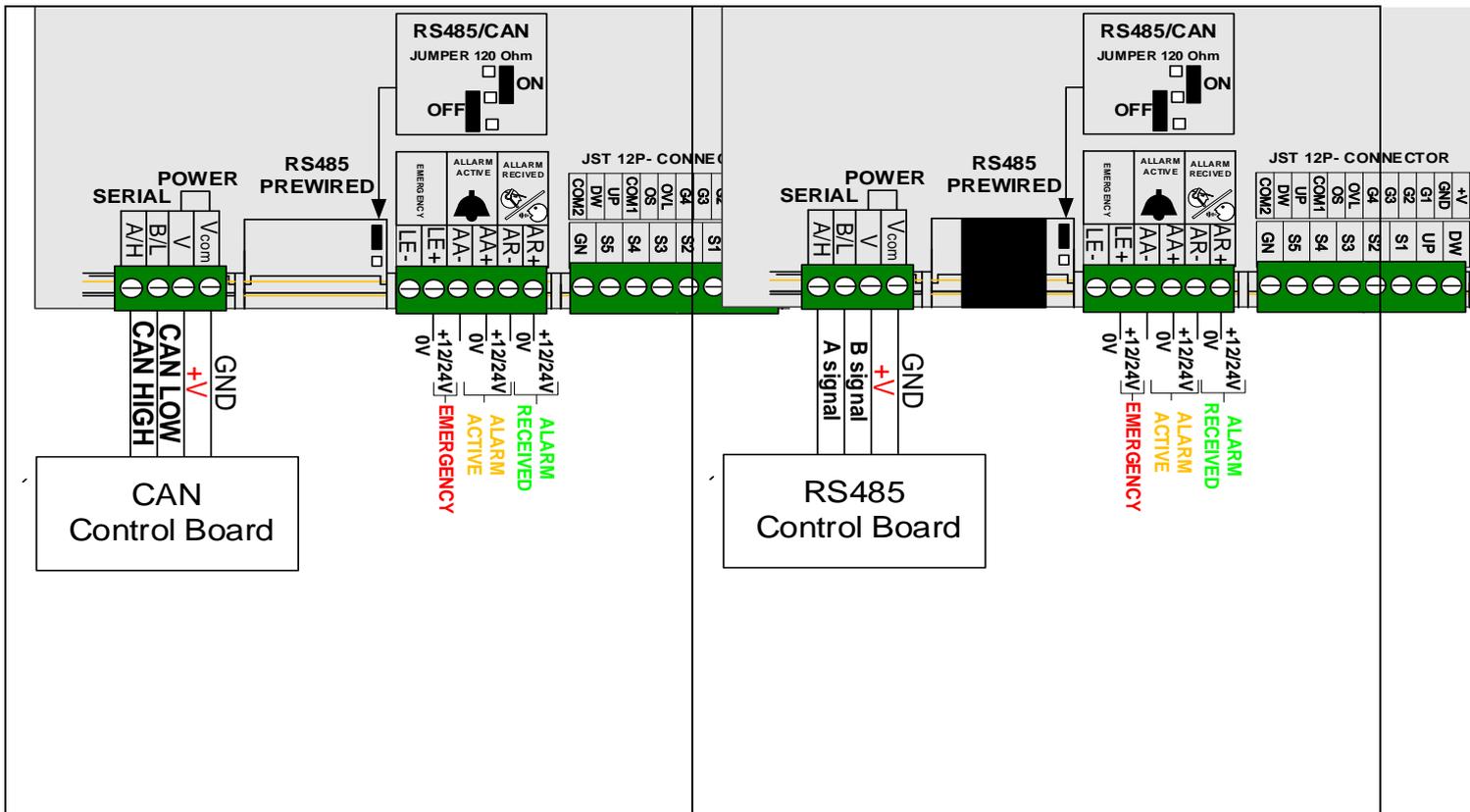
### 4.1 VEGA SERIAL (only for TFT901)



Common Anode

The VEGA SERIAL mode can be activated by setting **1.2 SET MODE= SERIAL V.**

### 4.2 CAN (only for TFT902) AND RS485 (only for TFT90)

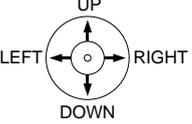


Parallel inputs can activate alarms, depending on the communication protocol.

**IMPORTANT:** If multiple devices are installed on the same serial bus, for a proper communication, the terminating resistor must be enabled on the master device and **ONLY** on the last slave device. To enable terminating resistor on the TFT, just insert the R120Ω jumper to ON.

## 5 DISPLAY PROGRAMMING

Use the mini joystick on the back of the device to enter and navigate the programming menu.

|   |                             |                   |
|---|-----------------------------|-------------------|
|  | CLICK & HOLD                | Enter the menu.   |
|  | CLICK                       | Confirm a choice. |
|  | UP<br>DOWN<br>LEFT<br>RIGHT | Scroll values.    |

### 5.1 PROGRAMMING MENU

|                   |                          |                           |                               |  |
|-------------------|--------------------------|---------------------------|-------------------------------|--|
| 1. Mode & Project | 1.1 Import Project       |                           |                               |  |
|                   | 1.2 Set Mode             |                           |                               |  |
|                   | 1.3 Address              |                           |                               |  |
|                   | 1.4 Serial Parameters    |                           | 1.4.1 CAN Address             |  |
|                   |                          |                           | 1.4.3 Lift Number             |  |
|                   |                          |                           | 1.4.4 Door Number             |  |
|                   |                          |                           | 1.4.5 Floor Stop Time         |  |
|                   |                          |                           | 1.5.1 Fire Service (Lobby)    |  |
|                   | 1.5 Special Functions    |                           | 1.5.2 Passing chime           |  |
|                   |                          |                           | 1.5.3 Separate Gong & Trigger |  |
|                   |                          | 1.5.4 Emergency Lowering  |                               |  |
|                   |                          | 1.5.5 Additional Function |                               |  |
|                   |                          | 1.5.6 Project default*    |                               |  |
|                   |                          |                           |                               |  |
| 2. Floor Symbols  | 2.1 Set first floor      |                           |                               |  |
|                   | 2.3 Edit Symbols         |                           |                               |  |
| 3. Edit Data      | 3.1 Capacity             |                           |                               |  |
|                   | 3.2 Serial Number        |                           |                               |  |
|                   | 3.3 CE Number            |                           |                               |  |
| 4. Options        | 4.1 Slideshow            |                           |                               |  |
|                   | 4.2 Input Debounce       |                           |                               |  |
|                   | 4.3 Arrow animation mode |                           |                               |  |
| 5. System         | 5.1 Time & Date          |                           |                               |  |
|                   | 5.2 Set Language         |                           |                               |  |
|                   | 5.3 Volume               |                           | 5.3.1 Messages Volume         |  |
|                   |                          |                           | 5.3.2 Music Volume            |  |
|                   | 5.3.4 Night Mode         |                           | 5.3.4.1 Messages Volume       |  |
|                   |                          |                           | 5.3.4.2 Music Volume          |  |
|                   |                          |                           | 5.3.4.4 Start Time            |  |
|                   |                          |                           | 5.3.4.5 End Time              |  |
|                   |                          | 5.3.4.6 Enable / Disable  |                               |  |
| 5.4 Standby       |                          |                           |                               |  |
| 5.5 Diagnostic    |                          |                           |                               |  |

### 5.2 MENU 1: MODE & PROJECT

By the submenus, the user can change the following settings on the display.

### 5.2.1 MENU 1.1: IMPORT PROJECT

Choose project n.X to import this file from the micro SD. Use the Vega Sirio Editor to create, modify and export the project file.

### 5.2.2 MENU 1.2: SET MODE

Choose the working mode, i.e. the communication mode between the display and controller/encoder (see par.3 and par.4).

### 5.2.3 MENU 1.3: ADDRESS

Set the parameter following the table below.

| WORKING MODE                      | INSTALLATION | ADDRESS  |
|-----------------------------------|--------------|--|
| 1 WIRE                            | FLOOR        | 0 = Lowest floor   |
|                                   |              | 1 = Next upper floor                                       |
|                                   |              | ...  |
|                                   |              | 15 = Max allowed floors                                    |
|                                   | CAR          | 16   |
| BINARY<br>INV. BINARY<br>GRAY     | FLOOR        | 0 = Lowest floor   |
|                                   |              | 1 = Next upper floor                                       |
|                                   |              | ...  |
|                                   |              | 63 = Max allowed floors                                    |
|                                   | CAR          | 64 = Normal  |
|                                   |              | 65 = No arrow audio messages                               |
| BCD                               | FLOOR        | 0 = Lowest floor   |
|                                   |              | 1 = Next upper floor                                       |
|                                   |              | ...  |
|                                   |              | 19 = Max allowed floors                                    |
|                                   | CAR          | 20 = Normal  |
|                                   |              | 21 = No arrow audio messages                               |
| SERIAL ENC (X762)                 | FLOOR        | 0 = Lowest floor   |
|                                   |              | 1 = Next upper floor                                       |
|                                   |              | ...  |
|                                   |              | 63 = Max allowed floors                                    |
|                                   | CAR          | 64 = Scrolling arrows                                      |
|                                   |              | 65 = Fixed arrows, no arrow audio messages                 |
|                                   |              | 66 = Fixed arrow, with automatic arrival sequence messages |
| STAND ALONE NO/<br>STAND ALONE NC | CAR          | 64   |
|                                   | NOT USED     | 0-63   |

## **5.2.4 MENU 1.4: SERIAL PARAMETER**

By the submenus, the user can change the following settings on the display.

### **MENU 1.4.1: CAN ADDRESS**

CAN address of the device. This setting does not work for the parallel modes and RS485.

### **MENU 1.4.3: LIFT NUMBER**

In some protocols, enables the listening of the device on different channels.

### **MENU 1.4.4: DOOR NUMBER**

In some protocols, it is used in case of multi-access lift.

### **MENU 1.4.5: FLOOR STOP TIME**

Not used.

## **5.2.5 MENU 1.5: SPECIAL FUNCTIONS**

By the submenus, the user can change the following settings on the display.

### **MENU 1.5.2: PASSING CHIME**

In BINARY, INVERTED BINARY, GRAY working mode, setting this parameter as ENABLE, the device emits a sound every time the floor indication changes.

The sound to emit must be loaded in Sirio Editor in the AUXILIARY MESSAGE 2 field.

The parameter 1.3 ADDRESS must be set as CAR installation (see par. 5.2.3).

### **MENU 1.5.3: SEPARATE GONG & TRIGGER**

In discrete wiring working modes, setting the parameter 1.5.3. SEPARATE GONG AND TRIGGER as:

- DISABLE: the GN input activates the GONG audio followed by the floor audio message;
- ENABLE: the GN input activates the GONG audio and INPUT 13 the audio floor message.

### **MENU 1.5.4: EMERGENCY LOWERING**

Special function for SERIAL V mode. Enabling this function, the EMERGENCY serial signalling from the controller activates the emergency screen with LIFT STATE 15 icon displayed, instead of the emergency icon (LIFT STATE 7). The serial EMERGENCY signalling always has priority over the one activated through LE+ pin.

### **MENU 1.5.5: ADDITIONAL FUNCTION**

Not used.

### **MENU 1.5.6: PROJECT DEFAULT**

Not used.

## **5.3 MENU 2: FLOOR SYMBOLS**

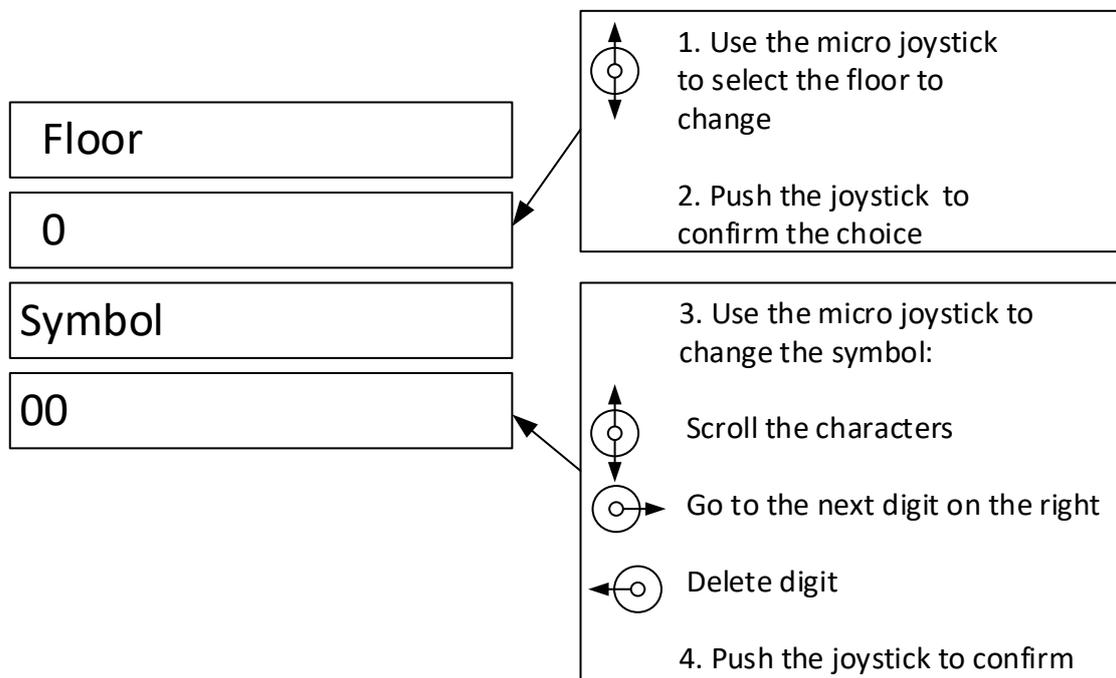
By the submenus, the user can change the following settings on the display.

### **5.3.1 MENU 2.1: SET FIRST FLOOR**

In discrete wiring working modes, the lowest floor is set by this menu. Other floors values will be shifted accordingly.

### 5.3.2 MENU 2.2: EDIT SYMBOL

Use this menu to change the floor symbol.



## **5.4 MENU 3: EDIT DATA**

By the submenus, the user can change the following character strings: capacity (menu 3.1), serial number (menu 3.2), CE number (menu 3.3).

IMPORTANT: the strings can only be modified if they are already activated in the project loaded on the display.

## **5.5 MENU 4: OPTIONS**

By the submenus, the user can change the following settings on the display.

### **5.5.1 MENU 4.1: SLIDESHOW**

SLIDESHOW = 0, default background image activated.

SLIDESHOW = 4-15 the background image changes every T second (where T is equal to the set value), showing all the images saved in the project.

### **5.5.2 MENU 4.2: INPUT DEBOUNCE**

INPUT DEBOUNCE: 40-1000, in discrete wiring modes is the inputs reading delay (in ms).

### **5.5.3 MENU 4.3: ARROW ANIMATION MODE**

FRAMES: the display uses as arrows the images loaded in SIRIO EDITOR in LIFT UP-DOWN ARROW/FRAMES.

FIXED: the display uses as arrows the images loaded in SIRIO EDITOR in LIFT UP-DOWN ARROW/OTHER IMAGES/UP-DOWN.

## **5.6 MENU 5: SYSTEM**

By the submenus, the user can change the following settings on the display.

### **5.6.1 MENU 5.1: TIME & DATE**

Select the installation date and time.

The time zone selection allows automatic daylight-saving time, with the value "None" in this field the time change remains manual.

IMPORTANT: the time and date can only be modified if they are already activated in the project loaded on the display.

### **5.6.2 MENU 5.2: SET LANGUAGE**

Set the programming menu language. From this menu it is not possible to change the language of the project (messages, alarms, audio announcement) which is chosen through SIRIO EDITOR.

### **5.6.3 MENU 5.3: VOLUME**

Set the volumes of floor and alarm messages (menu 5.3.1) and music (menu 5.3.2):

0 = audio disabled, 1 = minimum volume, ..., 15 = Maximum volume.

The night mode can be enabled by the menu 5.3.4.6 and start time and end time can be set by 5.3.4.4 and 5.3.4.5.

Set the night volume of alarm messages (menu 5.3.4.1) and music (menu 5.3.4.2):

0 = audio disabled, 1 = minimum volume, ..., 15 = Maximum volume.

### **5.6.4 MENU 5.4: STANDBY**

Through this menu, you set the energy-saving mode (display totally black).

0 = energy-saving disabled, 5 = energy-saving after 5 minutes of inactivity, ..., 180 = energy-saving after 180 minutes of inactivity.

#### **5.6.5 MENU 5.5: DIAGNOSTIC**

Function reserved for technical assistance interventions.

To disable the function, enter the menu and choose DISABLE.

## 6 AUDIO, MUSIC, SPEECH SYNTHESIS

The display can play floor announcements, alarm messages, and background music. For this to be possible, the audio files must have been inserted into the project, using the Sirio Editor program (see par. 7).

| N° speech synthesis languages enabled | Audio files features   |
|---------------------------------------|--|
| <u>1</u>                              | Maximum duration for floor messages: 3 sec.<br>Maximum duration for service messages: 6 sec. |
| <u>2</u>                              | No limit for floor/service messages.<br>The MicroSD card must always be inserted             |

Using the Sirio Editor software it is possible to add a music playlist. The playback of music files is automatic, and stops in case of:

- Activation of floor messages / direction messages / gong / alarms
- Activation of the Standby mode
- Access to the programming menu

**Note:** use a Micro SD card to export the project from the PC to the device. Do not remove the Micro SD card after exporting the files.

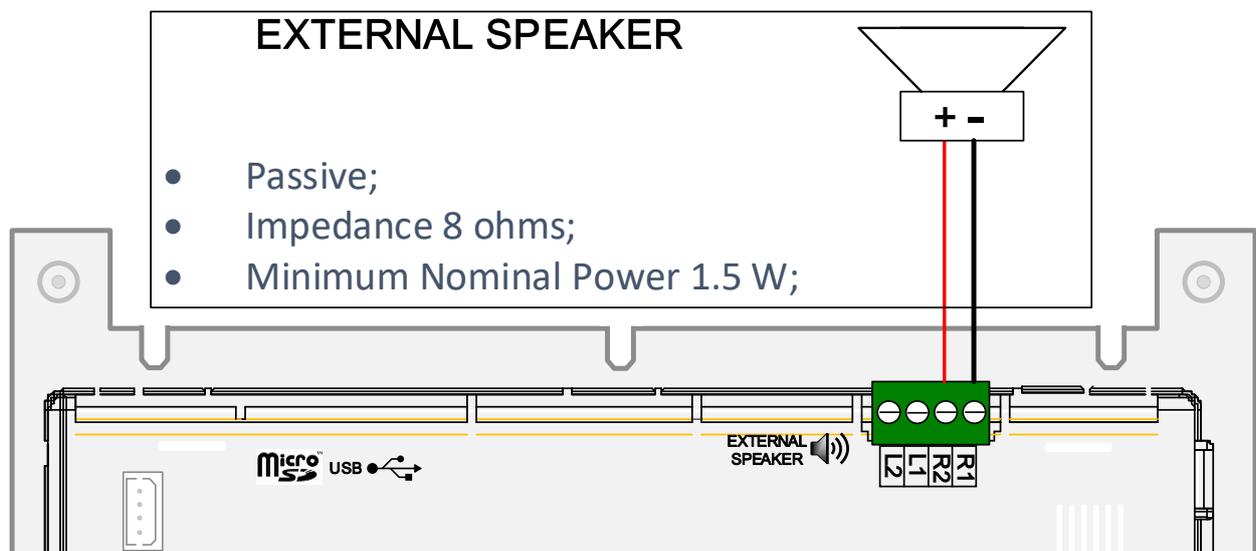
The volume can be adjusted or totally disabled, as explained in paragraph 5.6.3.

The language of the audio messages can't be modified from the programming menu, but only using the Sirio Editor software (see par. 6).

The volume can be changed or completely deactivated as explained in par. 5.6.3.

The language of audio messages cannot be changed by onboard menu but only by using the Sirio Editor program (see par. 7).

### 6.1 EXTERNAL SPEAKER

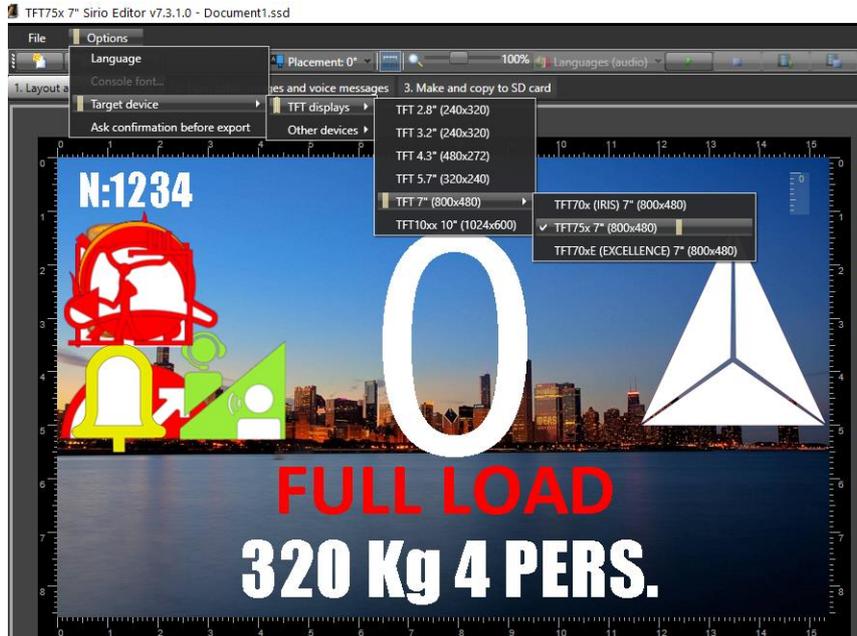


## 7 CREATION AND EXPORT OF PROJECTS FROM SIRIO EDITOR

Using the Sirio Editor software for PC you can modify floor, arrows and alarms (size and colour of symbols and descriptions, icons, audio messages) and background images.

### ON PC

- Create the project choosing in OPTION, the TFT75x display as TARGET DEVICE.



- Once the project is realized, from page 3 of the program, export it to a memory device. Both USB stick and micro SD card can be used as device for exporting, the USB cannot be used if the project contains background music or a second audio language.
- Select 0 as PROJECT NUMBER to export if you use an USB stick. Up to 10 different projects can be exported using a micro SD card. It is mandatory that projects are saved sequentially (Project 0, Project 1, ... and so on).

## 8 IMPORT OF PROJECTS INTO THE DISPLAY

After exporting the project to a memory device, it can be imported in the following ways:

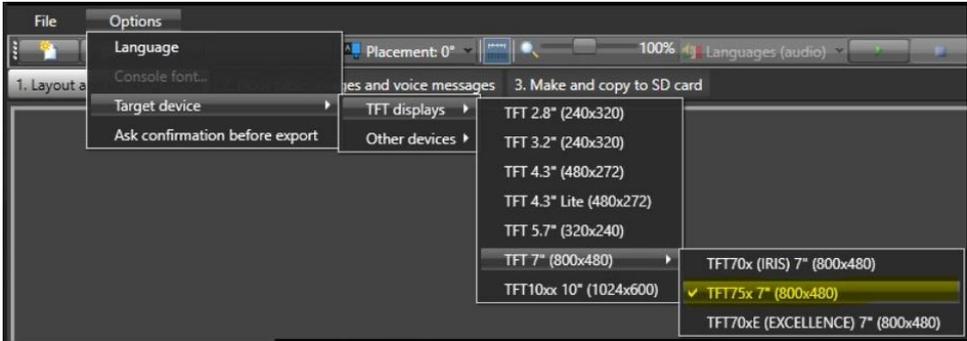
### Via USB key

- **IMPORTANT:** do not use USB for projects containing background music or a second language for speech synthesis.
- Connect the USB memory using the adapter cable (see page 1), the device will automatically load the last saved project.
- Remove the USB when the display shows “FLASH ROM PROGRAMMED”

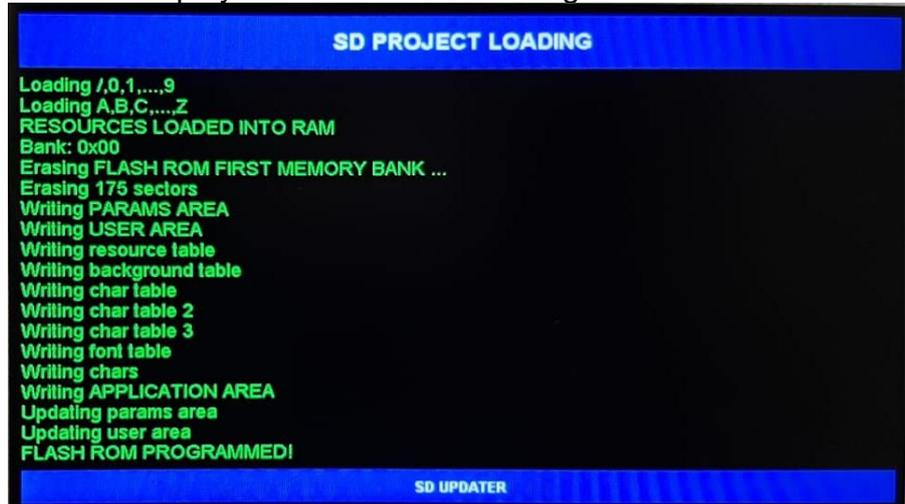
### Via Micro SD card

- Turn off the device.
- Insert the card into the specific slot.
- Turn on the device.
- Enter the programming menu.
- Select:
  1. MODE & PROJECT →1.1. Import Project and chose the project to import.**IMPORTANT:** The Micro SD can be removed after exporting the files, if it doesn't contain a project with background music or a second language for speech synthesis. Otherwise, it will be necessary to leave the Micro SD inserted in the appropriate slot.

## 9 TROUBLESHOOTING

| PROBLEM   | SOLUTION  |
|---|---|
| The display does not turn on  | Check the power supply between V and Vcom=12÷24Vdc  |
| The display does not show any floor   | <ul style="list-style-type: none"> <li>-To have inputs enabled by GND:<br/>connect the power supply V = GND, Vcom = + V;</li> <li>-To have inputs enabled + V:<br/>connect the power supply V = + V, Vcom = GND</li> <li>-Check the working mode of the display [par.3, par.4]</li> </ul>   |
| The floors sequence is not correct / the floor symbol remains fixed   | <ul style="list-style-type: none"> <li>-Check the set working mode [par. 2]</li> <li>-Check the floors sequence set in the project via the Sirio Editor software in the "Floor Table" window</li> </ul>   |
| The display shows a correct floor sequence, but the floors are not in the exact order.<br><i>Ex. 1,2,3 instead of 0,1,2</i> | Check the value inserted in the menu "Set first floor" [par.5.3.1]  |
| The floors are correct, but arrows are not shown  | Check the display address [par.5.2.3]   |
| The display screen shows two dashes - -   | <ul style="list-style-type: none"> <li>-Check the working mode of the display [par.3, par.4]</li> <li>-The serial connection could be interrupted, check the wiring.</li> <li>-Check the specific parameter of the control board for enabling the serial communication</li> </ul>   |
| The display does not import a project   | <ul style="list-style-type: none"> <li>-Check the target device choice through the software:</li> </ul>  <ul style="list-style-type: none"> <li>-Check if the projects have been exported sequentially (Project Nr. 0, Project Nr. 1, ... and so on);</li> <li>-Make sure you have carried out the export and import procedure as described in par.7 and 8</li> </ul> |

-In case the display remains in the following state:



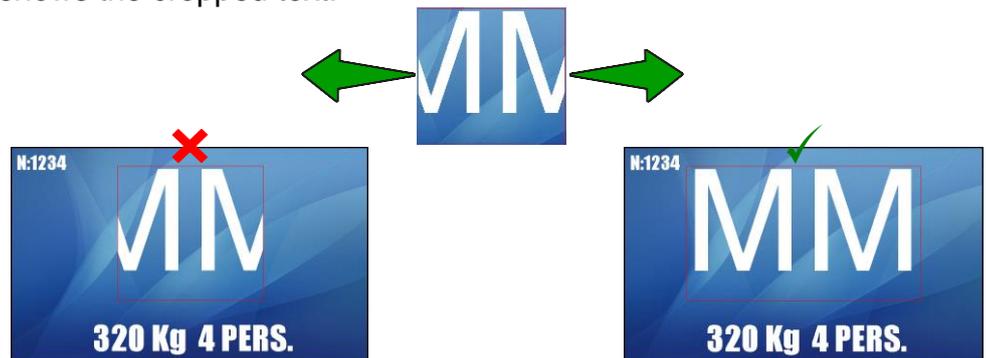
-If you are using an USB stick for importing the project, remove it;  
-Export the project again via software, or change the memory device.

In case the following screen is shown on the display



One or more red boxes are shown

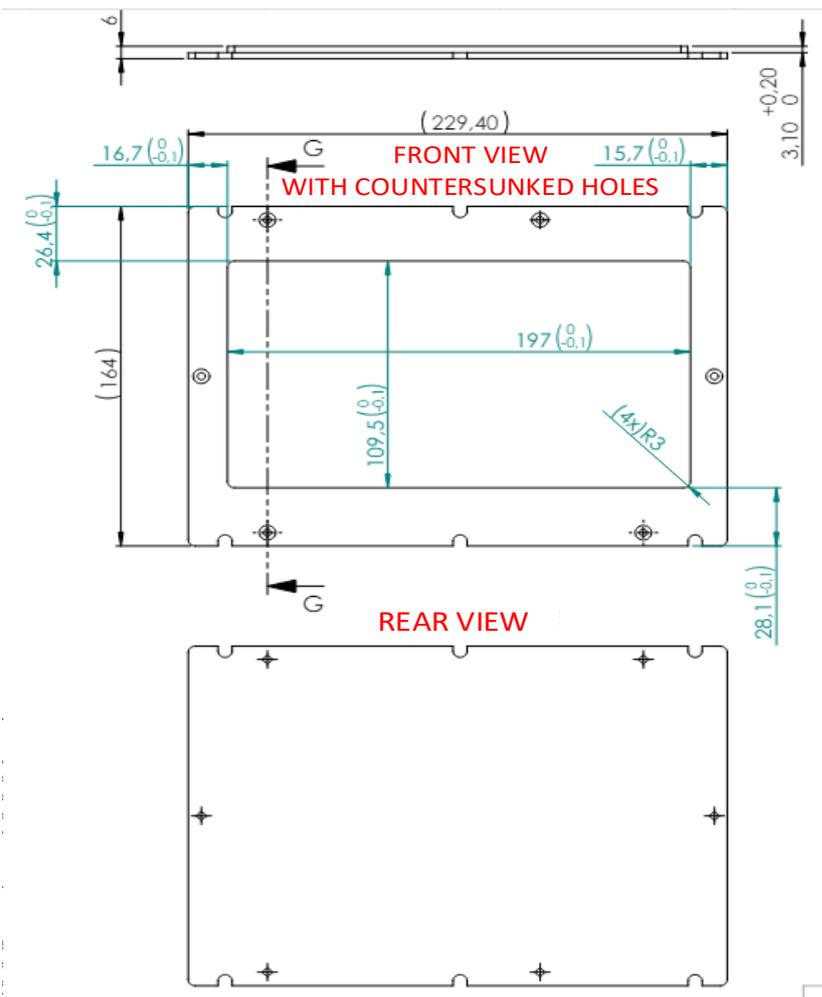
Open the project through Sirio Editor software and expand the corresponding text box: for example, if the red box is shown instead of the floor number, increase the box in the "Floor text" field that shows the cropped text.



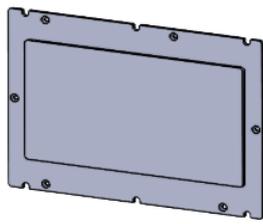
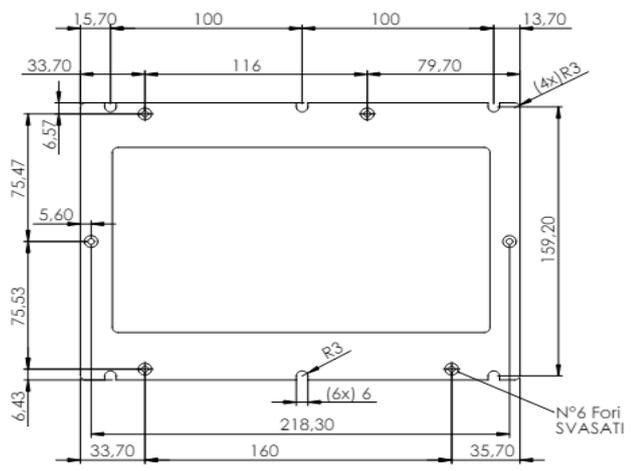
Export the project again as described in par. 7 and 8.

|  |   |
|--|---|
| <p>After some time, the display turns black</p>  | <p>-Probably the display is in stand-by mode. Check the Standby menu and adjust the selected time or disable (par.5.6.4).<br/>-If the fault occurs during the signal of the Firefighters operation, properly program the Fire Service (Lobby) menu (par.5.2.5)</p>  |
| <p>In the Binary, Inverted Binary, Gray, BCD working modes, when moving from a floor to another, the display shows an incorrect floor for a limited time</p> | <p>Increase the input reading time through the menu "Input Debounce" (par.5.5.2)</p>  |
| <p>The display doesn't announce any floor / the speech synthesis doesn't work</p>  | <p>-Check the connection of the GN input for the trigger of the floor messages (par.5.2.5);<br/>-Check the Volume menu (par.5.6.3);<br/>-Check the Night mode menu (par.5.6.3);<br/>-Check if the display is programmed as car address in p.5.2.3;<br/>-Check if the audio files are inserted in the project through the software Sirio Editor in "Floor Table" window, and check the selected language in the "Layout and working mode" window in General Options.</p> |

# 10 DIMENSIONS



FRONT VIEW QUOTED FOR COUNTERSUNK HOLES





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