



INSTALLATION MANUAL

CONSOLE MAGLINK 16T



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REVISION INDEX

DATE	REVISION NUMBER	DESCRIPTION	Firmware revision
01-03-12	1	INITIAL RELEASE	
15-05-12	2	Added up to 32 relays	
21-02-13	3	Antitheft management through input IN2 or through front panel	
04-09-13	4	General revision and layout amendments	6.0.1
12-12-13	5	Added new section about GSM modem Torex protocol available	7.3.0 7.3.3
13-05-14	6	IFSF implementation, TLG-Smiths protocol, Gallons/inches management, 6 sensors management with DIPSW2 ON, external inputs DIPSW 3, alarm activation sequence modified (Left, right, enter; left, right, esc), leak detection sequence modified (up, down, enter; up, down, esc)	8.0.5
15-06-15	7	General revision. New Certificate and Notification	8.2.8

30-07-15	8	GENERAL REVISION	11.X.X
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INTRODUCTION

The handbook gives all the instructions for installation and use of Maglink 16T console.

GENERAL WARNINGS

- Please read carefully the instructions given in this handbook before working on this equipment.
- The manufacture is not responsible of any operation performed not mentioned in this handbook.
- In case of failure or faulty operations, please refer to authorized people in charge for maintenance or directly to the manufacturer.
- The manufacturer refuses all responsibility for any eventual injury and/or damage to things caused by the missing observation of safety requirements.
- The assigned personnel is required to know all the safety requirements relative to this equipment.
- In case of doubts about functioning of the equipment please refer to authorized people for maintenance or directly to the manufacturer.
- Every tampering of the equipment relieves the manufacturer from any responsibility in front of competent authorities.



This product is used in fuel tanks and in hazardous areas for risk of explosion and fire. Subterranean leakage of fuel tanks may cause serious damages to environment and injury.

Improper use, not in accordance with the requirements, may affect the safety of the product

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This product complies with EU Directive 2002/96/EC.

The crossed-bin symbol on the device indicates that the product, at the end of its lifecycle, should be disposed separately from household waste, must be brought to a electrical and electronic equipment collection point.

DESCRIPTION

Console for monitoring level gauge and tanks alarm. Bus management up to 16 probes, 16 ON-OFF sensors, 4 slave displays, 2 channel each, 16 integrated relays and other 16 relays on the bus with outputs and programmable events, 32 relays in total. Can be interfaced with the major management systems located in petrol stations.

Main features	
Supply	100-240 VAC
Consumption	45 VA
Working temperature	-10°C / +50°C
Relative humidity	From 5% to 95% (non condensing)
Number of probes	16
Number of ON-OFF sensors type XLR	16
Number of ON-OFF reed sensors	6 (only with Dipswitch 2 ON)
Number of slave display 2 ch	4
Relay output	32 (16 integrated + additional slave 16 relay card)
Low power relay output	MAX 33Vac/70Vdc 2A
Probes serial communication with	RS485
Host Communication	RS232
Printer communication and software for console configuration	RS232
Connection with software for console configuration	USB
Enclosure	Metallic painted
Protection	IP20
Dimensions	355x260x110 mm

COMPATIBLE PROBES MODEL LIST

The following probes models can be connected to MAGLINK16T console:

- XMT EXD 485 polling mode
- XMT SI 485 polling mode
- XMT SI RF
- XLR SI 485 polling mode

And auxiliary equipment:

- Slave relay boards
- Local or remote printer
- Reed sensors

INSTALLATION

- If mixed with air, the flammable vapors may cause explosion. Hazardous areas may be originated therefore by the presence of gas or vapors.
- Explosions or fires may cause damage, even lethal.
- This console is not explosion proof.
- Do not install the console in hazardous area.

INSTALLATION SITE

Regarding the installation site, it is necessary to consider that the console must be protected against vibrations and extreme climatic conditions (in particular high/low temperatures, humidity, etc.) which may damage the electrical circuits. Please be sure to install in an area protected from humidity and sprinkles of water.

220Vac ELECTRICAL CONNECTION

To realize the electrical connection please proceed as follow:

- Switch off all the power switches on the electrical board panel.
- Connect between board panel and the console using the appropriate connectors.
- To connect driving force, please use cable with 3 wires whose section is at least 1,5 mm² (phase, neutral, earth) adequately protected. Supply cable must be approved according to standards IEC 60227 or IEC 60245.
- Be sure that the power plug used has ground round connection and that there is a protection device acting against short circuits and overloads.
- The power cable must be always easy recognizable and reachable since it has disconnecting function too.

Regarding probes connection, please refer to chapter "Probes connection".



- There is high voltage into the console which may be lethal.
- The equipment installed in hazardous areas shall be explosion-proof or intrinsically safe according to the degree of protection required.

INSTALLATION PROCEDURE

Fix the console to the wall using the supplied bracket along the product. To fix the console to the wall use bolt sleeves.

PRODUCT CLEANING

For product cleaning must be used a cloth dampened only with water and common detergents non aggressive without use of any acids, chemical solvents or organic substances.

SAFETY INSTRUCTIONS

"Safety Instruction" attached.

PRODUCT LABEL

START ITALIANA SRL

Via Pola,6 – 20813 Bovisio Masciago (MB) ITALY

MAGLINK-16T Serial nr: xxxxxx

Voltage: 100-240V 50-60Hz

Power: 45VA

FUSE: 250V 1A L

Working Temperature: -10°C + 40°C



0722

CEC 10 ATEX 025 Rev.3



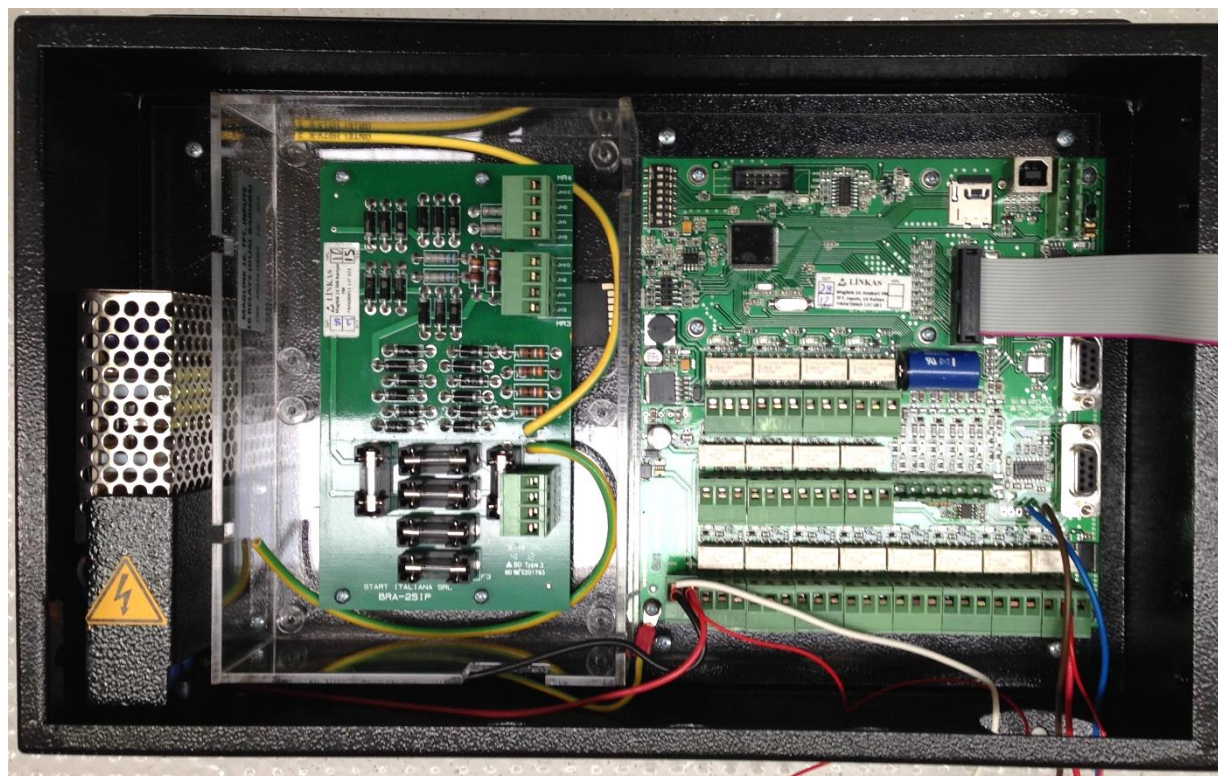
II (1) G [Exia] IIB

FISCO power supply $U_m=250V$ [Exia] IIB

MAIN COMPONENTS

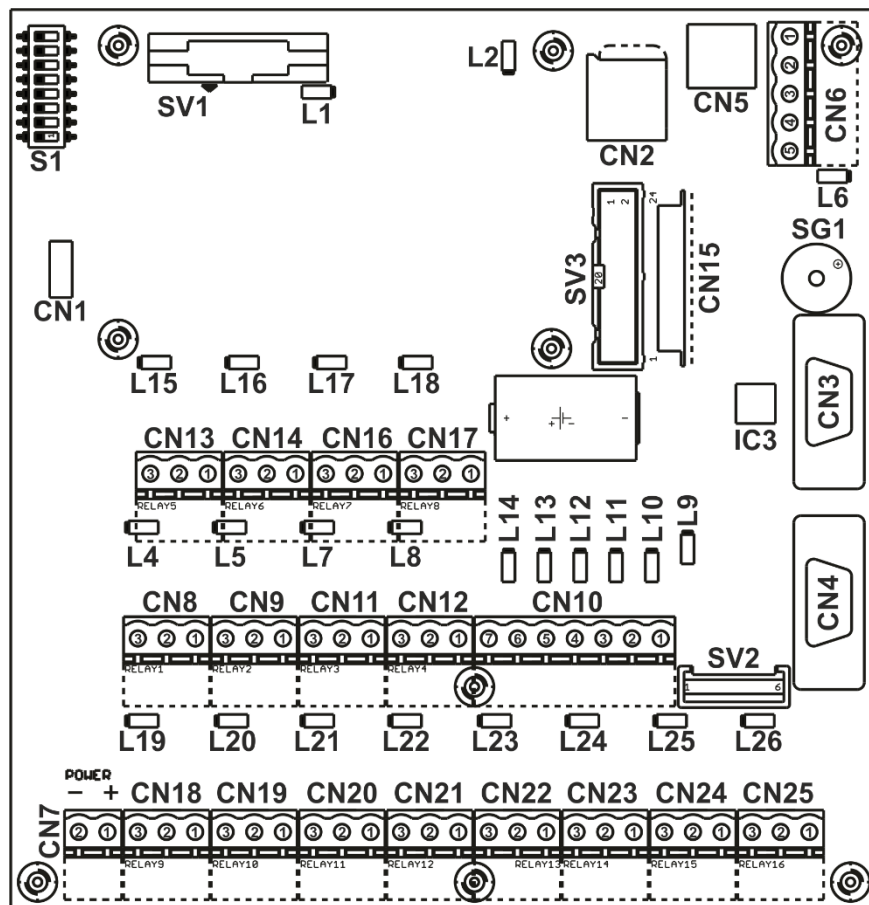


Power supply, intrinsically safe barrier and main board



CPU MAIN BOARD

The main board manages all functions of the console and various field devices through its own interface. Below are indicated all possible functions, some of them are optional (for example inputs, modem, can-bus).



CN6 is the RS485 bus connector.

The following products can be directly connected to this connector:

- ex-proof probes
- PCB slave relay
- remote displays
- RF receiver
- BRA-SIP or BRA-2SIP in case of intrinsically safe probes

CN2: micro SD card slot. If SD card is not present, date and time are red highlighted and all functionality of delivery, leakage and alarm history are lost.

CN5: USB programming through Console_Config, the prerequisite is to install appropriate driver before operating, it is available on the download area of our website (www.startitaliana.com)

CN4: RS232 programming through Console_Config, Double Gilbarco Protocol selectable via DIPSW1.

CN3: RS232 Host connection, refer to protocol list.

CN10: pin 6, input1. Connecting this pin to 12V a print command is generated, this is useful in case of remote printer where it's not possible to print through the front panel.

CN10: pin 5, input2. This input is used for enabling/disabling antitheft accordingly with the DIPSW3 settings. Give 12V to enable this pin (input enable), otherwise 0V to disable pin (input disable).

*** IMPORTANT:** with Dipswitch 2 ON (enabled for ON-OFF sensors) the connector CN10 is disabled for functions listed above.

Connectors functions

- CN1 : JTAG programming connector
- CN2 : SD card connector
- CN3 : COM1 and ISP programming port
- CN4 : COM2 port
- CN5 : USB port
- CN6 : RS485 port
- 1- Probe power output (RED or black)
 - 2- RS485-B (Brown)
 - 3- RS485-A (Blue)
 - 4- GND (White)
 - 5- EARTH
- CN7 : MAGLINK16 power input (+12V)
- 1- +12V
 - 2- GND
- CN8 : Relay1 connector
- 1 – Normally open
 - 2 – Common
 - 3 – Normally closed
- CN9 : Relay2 connector
- 1 – Normally open
 - 2 – Common
 - 3 – Normally closed
- * CN10 : Inputs connector (with Dipswitch 2 OFF)
- 1- Input 6
 - 2- Input 5
 - 3- Input 4
 - 4- Input 3
 - 5- Input 2 (antitheft remote control command)
 - 6- Input 1 (printer remote control command)
 - 7- GND
- * CN10 : Inputs connector (with Dipswitch 2 ON)
- 1- Input 6
 - 2- Input 5
 - 3- Input 4
 - 4- Input 3
 - 5- Input 2
 - 6- Input 1
 - 7- GND
- CN11 : Relay3 connector
- 1 – Normally open
 - 2 - Common
 - 3 – Normally closed
- CN12 : Relay4 connector
- 1 – Normally open
 - 2 - Common
 - 3 – Normally closed
- CN13 : Relay5 connector
- 1 – Normally open
 - 2 - Common

	3 – Normally closed
CN14	: Relay6 connector
	1 – Normally open
	2 - Common
	3 – Normally closed
CN15	: TFT flex connector
CN16	: Relay7 connector
	1 – Normally open
	2 - Common
	3 – Normally closed
CN17	: Relay8 connector
	1 – Normally open
	2 – Common
	3 – Normally closed
CN18	: Relay9 connector
	1 – Normally open
	2 - Common
	3 – Normally closed
CN19	: Relay10 connector
	1 – Normally open
	2 – Common
	3 – Normally closed
CN20	: Relay11 connector
	1 – Normally open
	2 - Common
	3 – Normally closed
CN21	: Relay12 connector
	1 – Normally open
	2 – Common
	3 – Normally closed
CN22	: Relay13 connector
	1 – Normally open
	2 - Common
	3 – Normally closed
CN23	: Relay14 connector
	1 – Normally open
	2 - Common
	3 – Normally closed
CN24	: Relay15 connector
	1 – Normally open
	2 - Common
	3 – Normally closed
CN25	: Relay16 connector
	1 – Normally open
	2 - Common
	3 – Normally closed

L1	: Working led
L4	: Relay1 status led
L5	: Relay2 status led
L6	: Probe power status led
L7	: Relay3 status led
L8	: Relay4 status led
L9	: Input6 status led
L10	: Input5 status led
L11	: Input4 status led
L12	: Input3 status led
L13	: Input2 status led
L14	: Input1 status led
L15	: Relay5 status led
L16	: Relay6 status led
L17	: Relay7 status led
L18	: Relay8 status led
L19	: Relay9 status led
L20	: Relay10 status led
L21	: Relay11 status led
L22	: Relay12 status led
L23	: Relay13 status led
L24	: Relay14 status led
L25	: Relay15 status led
L26	: Relay16 status led
S1	: Dip switches
SG1	: Buzzer
SV1	: Modem connector
SV2	: Can-bus connector
SV3	: TFT-LCD panel connector

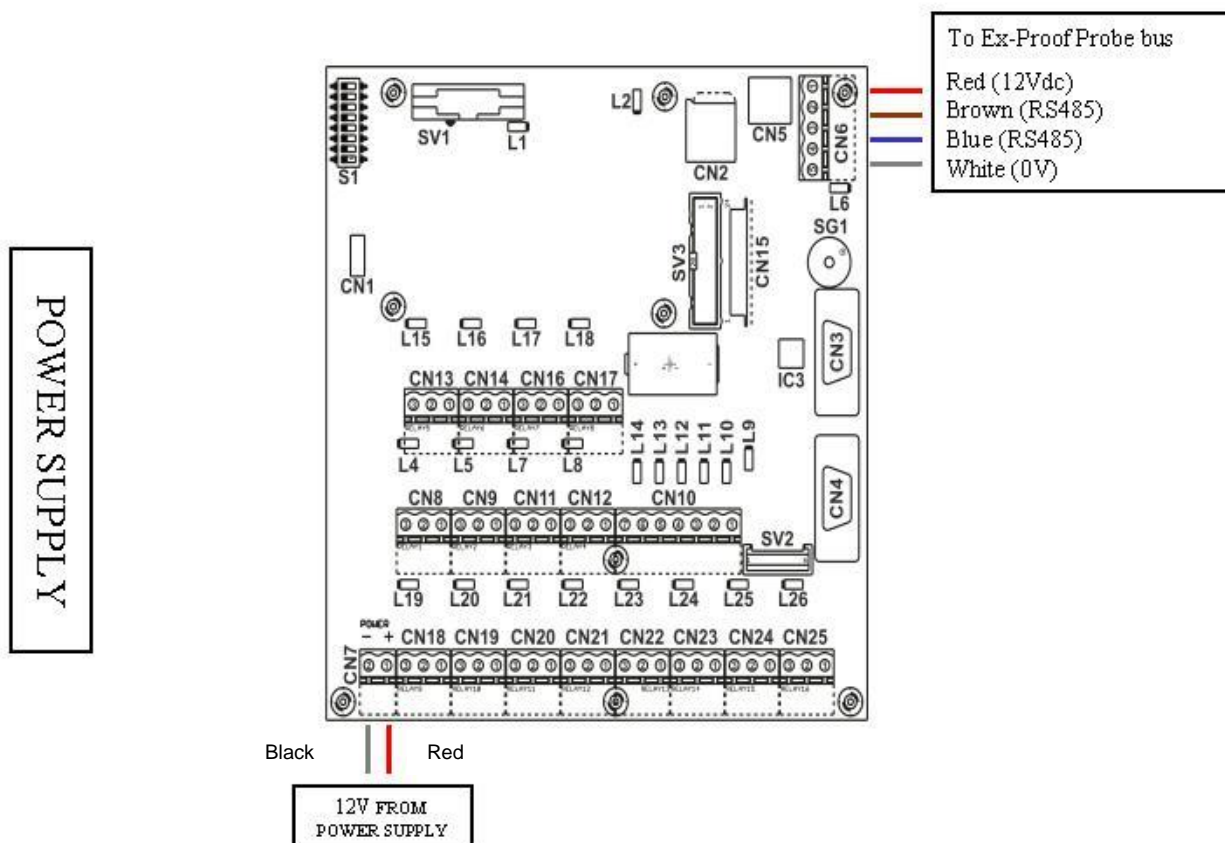
DIP SWITCH SETTINGS

S1: DIPSWITCH

- DIPSW1 OFF = Console Config, printer or DCD connection
- DIPSW1 ON = Double Gilbarco protocol enabled for Site Manager web application
- DIPSW2 OFF = enable connector CN10 for connection to printer and input to enable/disable antitheft function
- DIPSW2 ON = enable connector CN10 for connection to up to 6 reed sensors
- DIPSW3 ON = antitheft managed by input nr. 2 (from fw version 5.0.2)
- DIPSW3 OFF = antitheft managed by front panel (from fw version 5.0.2)
- DIPSW4 ON = inverse relay activated
- DIPSW4 OFF = normal relay activated
- DIPSW5 ON = last 10 deliveries (from version 6.0.0)
- DIPSW5 OFF = last delivery (from version 6.0.0)
- DIPSW6 ON = all memory cleared with default value at the power up system reset
- DIPSW6 OFF = normal operation

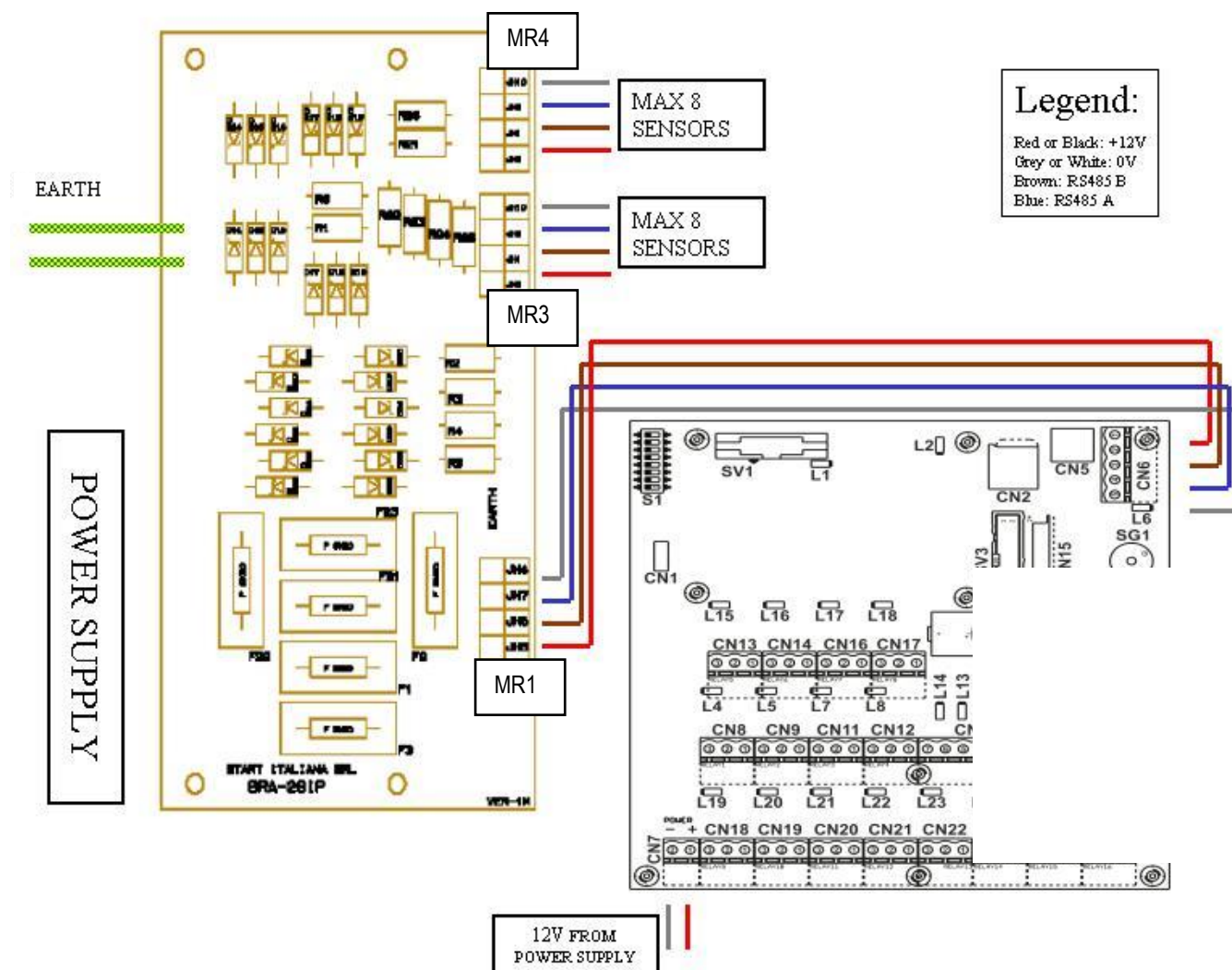
PROBES CONNECTION

CONNECTION TO EX-PROOF PROBES MODEL XMT-EXD AND
TO RF RECEIVER FOR PROBES XMT-SI-RF



CONNECTION TO INTRINSICALLY SAFE PROBES MODEL XMT-SI-485 TO BARRIER MODEL BRA-SIP

If sensors to be connected are more than 16, n. 2 BRA-SIP are installed and additional external barriers must be used since one barrier can supply up to 8 sensors only.



Connection cables colors

From top to the bottom:

MR3

MR3-JH10: White (GND)
MR3-JH2: Blue (RS485)
MR3-JH1: Brown (RS485)
MR3-JH3: Red (+12V)

MR4

MR4-JH10: White (GND)
MR4-JH2: Blue (RS485)
MR4-JH1: Brown (RS485)
MR4-JH3: Red (+12V)

MR1 – C6 to Main Board connection

SIT IFSF CONVERTITOR

From software Console Config, in System Configuration tab, select **IFSF** to enable or disable the function as shown below. In case **IFSF** is enabled you have 1 minute timeout to write next command to MagLink, if you wait more MagLink will enter in sync-mode for IFSF board until it receives the complete sync command from IFSF software.

Country code: 0000 or 9999 for independent country code.

Node address: must be in range: 001-127.

TLG Model:

TLG Type: *TLG settings*

TLG Serial:

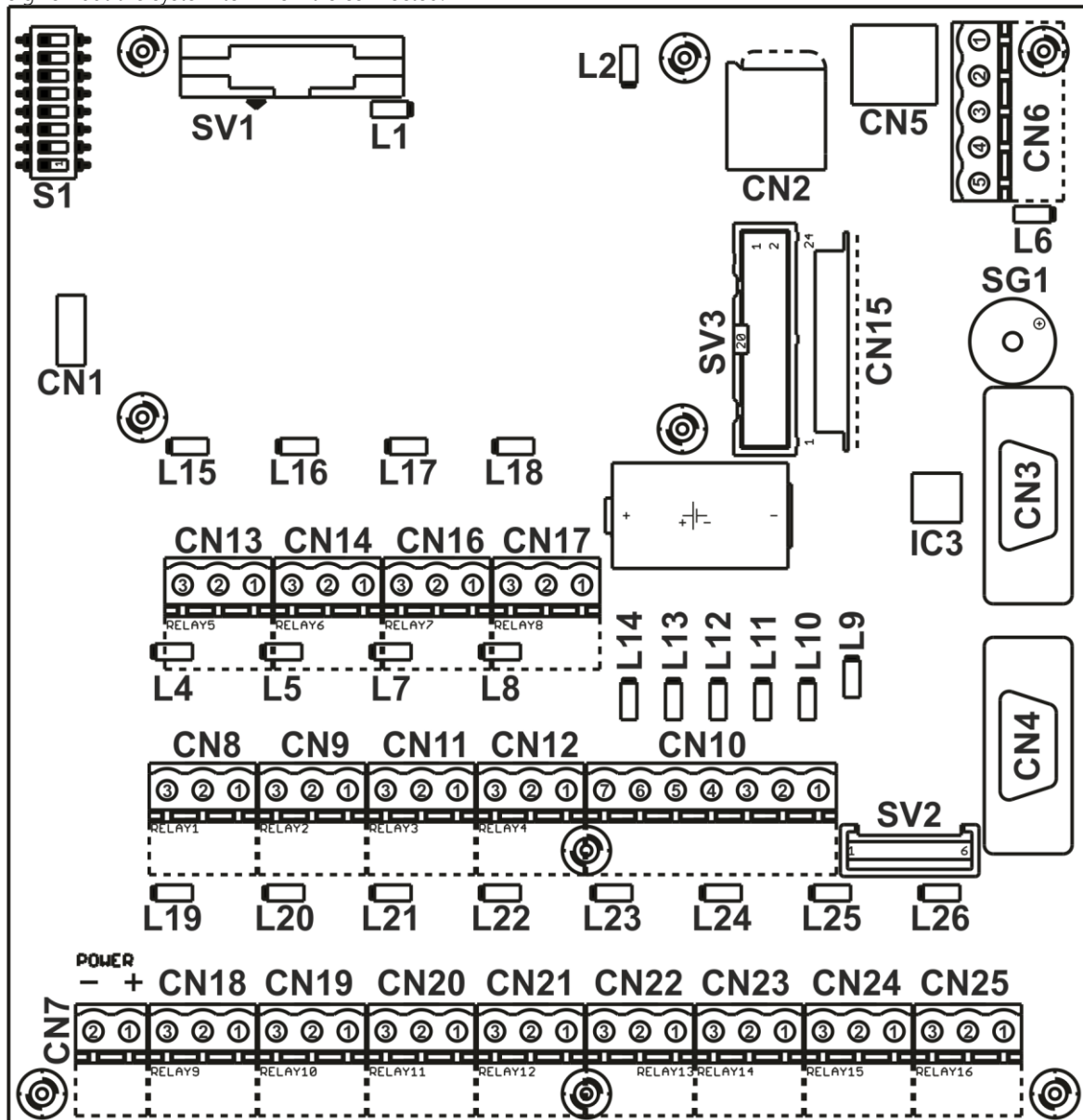
MAIN Pwd: to access maintenance mode.

System configuration			
System	Station	Modem	IFSF
IFSF Enabled <input checked="" type="checkbox"/>			
Country Code		0000	
TLG Model		XMT	
TLG Type		485	
TLG Serial		1	
Node address		0	
MAIN Pwd			



CONSOLE VIA RS232 HOST CONNECTION

For distances up to 15 mt the remote connection between MAGLINK16 and host can be done using serial link RS232C as per the indications given but the system to which it is connected.



- CN5 USB programming through Console_Config, the prerequisite is to install appropriate driver before operating, it is available on the download area of our website (www.startitaliana.com)
- CN4 RS232 programming through Console_Config, Double Gilbarco Protocol selectable via DIPSW1.
- CN3 RS232 Host connection, refer to protocol list.

CN10 pin 6, input1. Connecting this pin to 12V a print command is generated, this is useful in case of remote printer where it's not possible to print through the front panel.

CN10 pin 5, input2. This input is used for enabling/disabling anti theft accordingly with the DIPSW3 settings. Giving 12V to this input will enable, giving 0V to this input will disable.

*** IMPORTANT:** with Dipswitch 2 ON (enabled for ON-OFF sensors) the connector CN10 is disabled for the functions listed above.

Here below some examples of common connections to management systems.

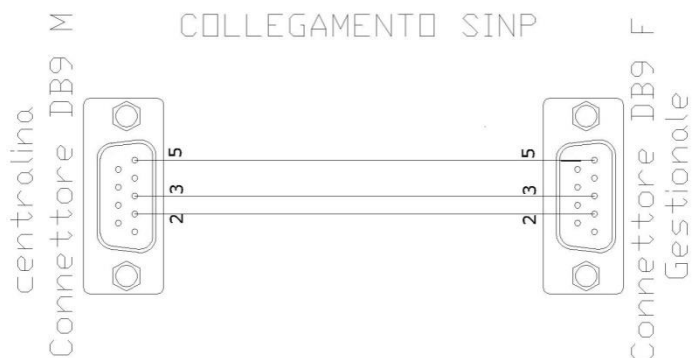
MANAGEMENT SYSTEMS COMMON CONNECTION

MAGLINK16T can be connected to several management systems (PIGNONE; GILBARCO; TOKHEIM; DRESSER; TOPLEVEL (probe emulation); DIALOG; RETALIX; DOMS; ORPAK; TOREX; TLG-SMITHS) via serial port RS232 (CN 3)

ES:

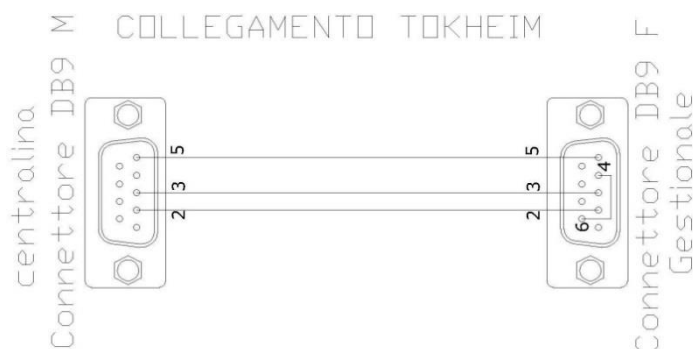
DRESSER WAYNE SINP e TOPLEVEL:

CONSOLE		SYSTEM
PIN 2	>	PIN 2
PIN 3	>	PIN 3
PIN 5	>	PIN 5



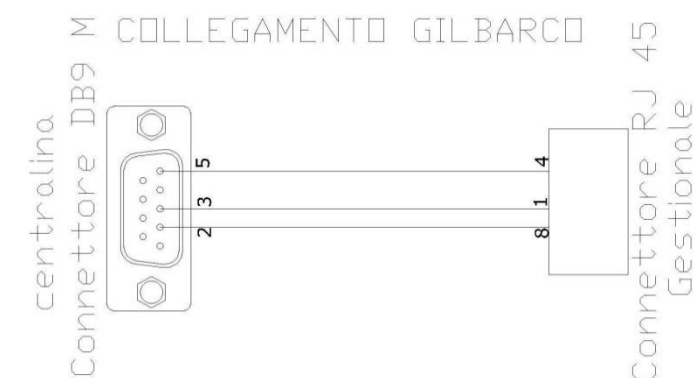
TOKHEIM and DIALOG:

CONSOLE		SYSTEM
PIN 2	>	PIN 2
PIN 3	>	PIN 3
PIN 5	>	PIN 5
PIN 4	>	PIN 6



GILBARCO Passport Europe (9600 O71):

CONSOLE		SYSTEM
PIN 2	>	PIN 8
PIN 3	>	PIN 1
PIN 5	>	PIN 4



DOMS (9600 E71)
DIALOG (1200 N81)
TOREX (2400 E71)

SERIAL PRINTER CONNECTION VIA RS232

Printer can be connected to the console for distances up to 15 mt.

Print command can be issued from front panel display for local usage or giving 12V on CN10 terminal 6 for remote printing control.

Printer must be powered via 220Vac socket.

CN4: RS232 serial printer connection.

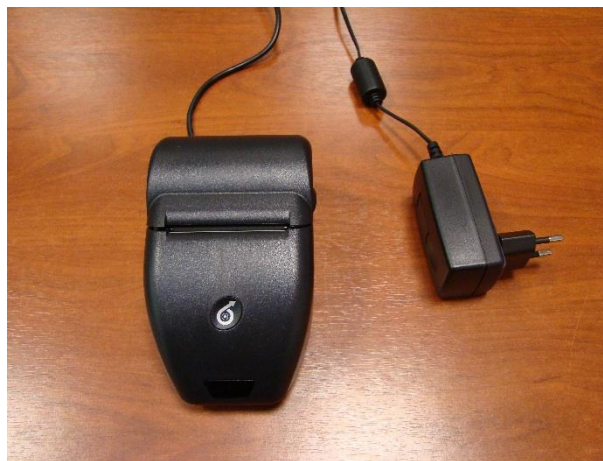
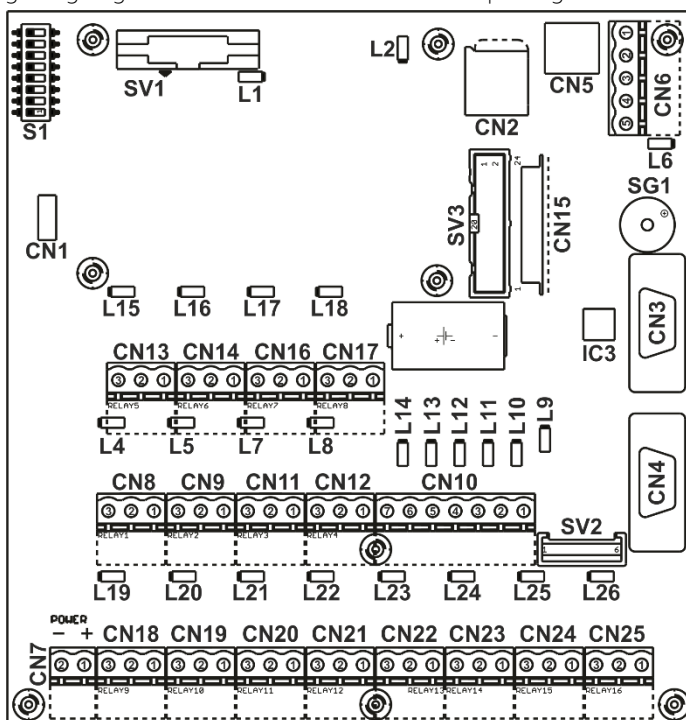
For print operations be sure that DIPSW1 is OFF and DIPSW2 is OFF.

Printer can be connected to the console only after having finished the programming via Console_Config.

RS232 CX connection cable must be prepared on site. Use DB9 Male connector as per wiring described below:

DB9M	DB9M
Console side	Printer side
2	3
3	2
5	5

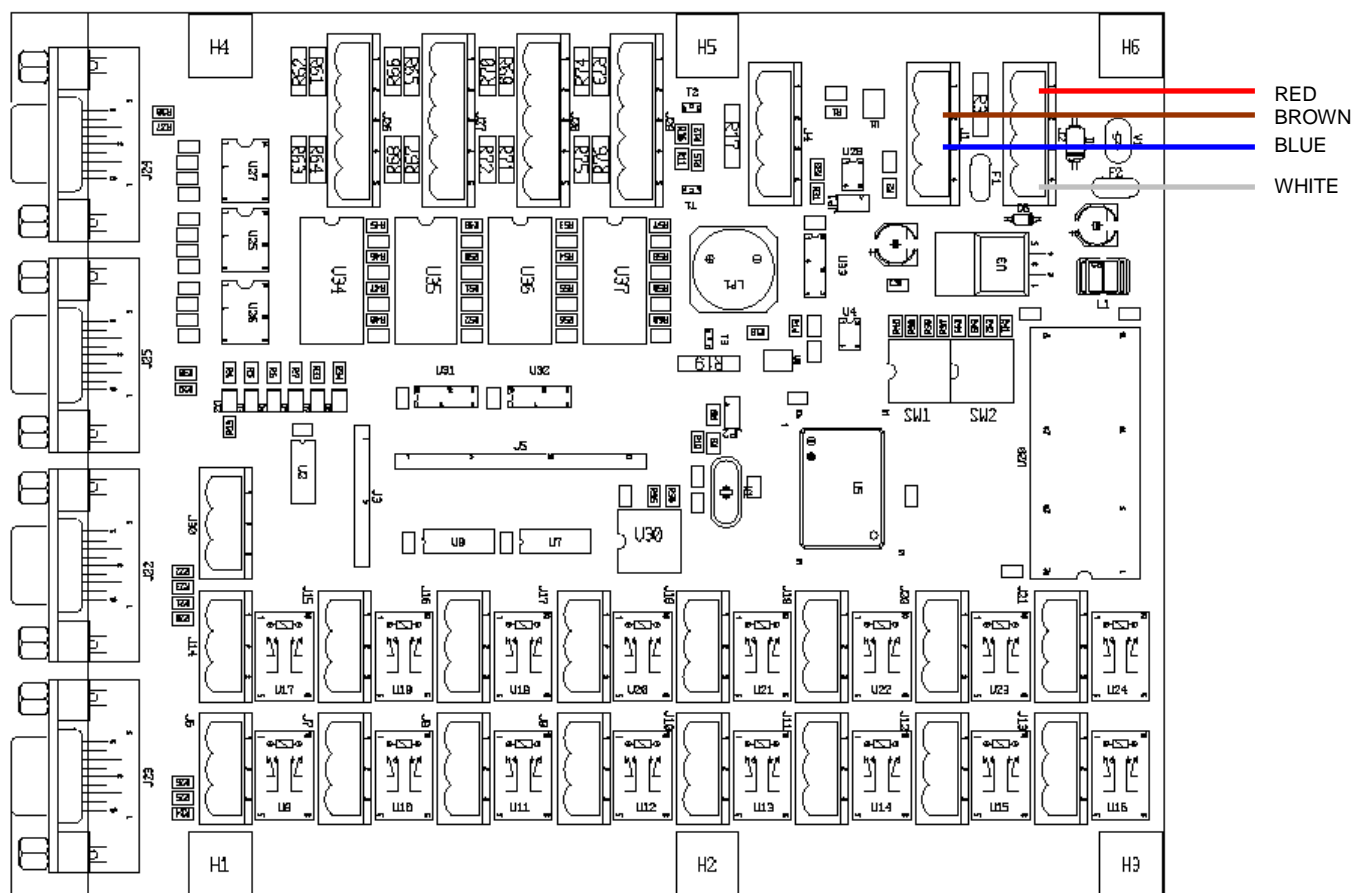
If remote print control is needed then the additional accessory of control is supplied, and must be connected to CN10 connector terminal 6 and +12V powered.
(Only when Dipswitch 2 is OFF)



Remote printer control is optional, button with cable of maximum length 15mt.

PCB SLAVE RELAY

This board connected to the probes bus with 0 address corresponds to relay configuration from 17 to 32.



R25	R26	R27	R28	R29	R30	R31	R32
R17	R18	R19	R20	R21	R22	R23	R24

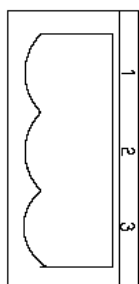
Probes BUS Connection must be done before the barriers, if present.

Connections are made using two connectors on the top side of the board following these colors:

RED	:	+12V
BROWN	:	RS485-B
BLUE	:	RS485-A
WHITE	:	GND - 0V

CONNECTIONS:

Each connector is composed as follow:



Terminal strip 1

Terminal strip 2

Terminal strip 3

CONNECTOR n = RELAY N

Terminal strip 1:	COMMON
Terminal strip 2:	Normally open
Terminal strip 3:	Normally closed

PROGRAMMING

Into the MicroSD card supplied with the console Maglink 16T you will find the following files:

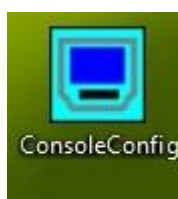
- Folder *Documentation*: includes Maglink 16T, probes XMT, XMT-SI and XMT-SI-RF technical manuals in Italian and English language
- Folder *FlashMagic*: includes the software needed for the console firmware update and the user instructions, together with the last available firmware version
- Folder *Software for console configuration*: includes software **ConsoleConfig** for console configuration updated to the last available version and the multi-language file **label_consoleconfig.txt** (important: please keep both files into the same folder in order to allow the language choice into ConsoleConfig software)
- File **label_maglink.txt**: necessary for the correct functioning of multi-language configuration inside the console
- Folder *USB Driver Maglink*: Driver for Windows XP and Windows 7



USB CONNECTION

Console programming has to be done using USB port or RS232.

For USB programming before connecting USB cable to the PC please install the driver included into the folder USB Driver Maglink.



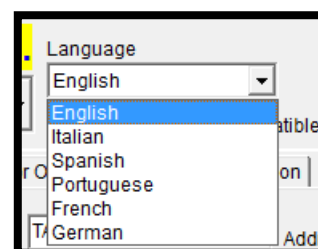
Then connect the console to PC and run Console_Config program.

Direct RS232 is suggested due to some limitation in buffer size of USB which depends on computer itself.

Select COM port.

Select the language for software visualization.

If the COM port is correct, program will start uploading the data from the console.



For correct working please select Connection mode **ONLINE**.

For each tank user must set appropriate parameters.

Tank	it is possible to select from 1 to 16 available tanks.
Description	Description of the tank name which will appear on the display, for example: Diesel
Address	Unique serial number written on the probe head.
Product	select product type contained into the tank where has been installed the level sensor referred to the S.N. selected on the channel.
Tot. capacity	Total capacity in liters/gallons of the tank, data provided by the tank strapping table.
Tank Height:	height of tanks in mm/inches, data provided by the tank strapping table.
Offset:	Offset product float (-30000 +30000 mm): value shown in mm with ± 1 mm resolution to align the measure of the product float's height.
Zero Water	Offset water float (30000 mm): value shown in mm with 1 mm resolution with an absolute value below which the reading of the water float's height is zero.
IFSF – Product Nb	numeric code (max 8 digits) used to identify the product
ID/SN DVD and DVD Offset:	for future use.

ALARM DEFINITION

In the alarm definition section it is possible to set various alarm trip point for each level probe.

Alarm HH	very high alarm point in mm/inc.
Alarm H	high alarm point in mm/inc.
Alarm L	low alarm point in mm/inc.
Alarm LL	very low alarm point in mm/inc.
Alarm Water	presence of water alarm point in mm/inc.

DELIVERY PARAMETER

Minimum delivery detection value for rate lt/min and gallons/inches.

LEAKAGE PARAMETER

Minimum Value in liters for the leakage detection.

TANK LEVEL

In the Tank level section it is shown the current tank status referred to the selected channel.

Product (mm/inc)	Product measure as detected by the probe of the selected channel.
Water (mm/inc)	Water measure as detected by the probe of the selected channel.
Temperature (C°)	Product temperature as detected by the probe of the selected channel.

RELAY DEFINITION

In this section it is possible to select the activation function of relay from 1 to 32.

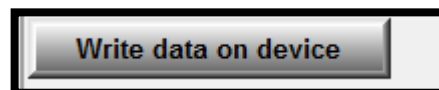
The relay can be managed one by one for each channel or groups, one relay for multiple channel.

First 16 relay are mounted into the main board, additional from 17° to 32° relay are located in the expansion slave relay card connected to connector CN6 referred to the bus of the probe on the main board of the console and having address 0.
Do not connect the expansion card after BRA-SIP card.

Relay definition			
N.1	Not used	N.17	Not used
N.2	Not used	N.18	Not used
N.3	Not used	N.19	Not used
N.4	Not used	N.20	Not used
N.5	Not used	N.21	Not used
N.6	Not used	N.22	Not used
N.7	Not used	N.23	Not used
N.8	Not used	N.24	Not used
N.9	Not used	N.25	Not used
N.10	Not used	N.26	Not used
N.11	Not used	N.27	Not used
N.12	Not used	N.28	Not used
N.13	Not used	N.29	Not used
N.14	Not used	N.30	Not used
N.15	Not used	N.31	Not used
N.16	Not used	N.32	Not used

WRITE DATA ON DEVICE

This button allows to transfer the information defined on the software of the console. This operation must be repeated for each channel to be settled. If the channel is changed without transferring data to the console those new data will be lost.



TANK

Select channel (tank) to be configured.

After connection the rectangle on the right must be green. This shows proper connection.

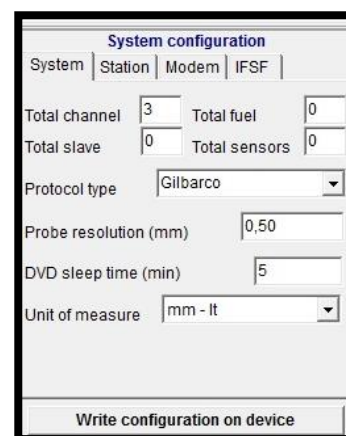
During data downloading the rectangle becomes red to show communication in progress. At the end of downloading the rectangle must become green again.



SYSTEM CONFIGURATION

SYSTEM

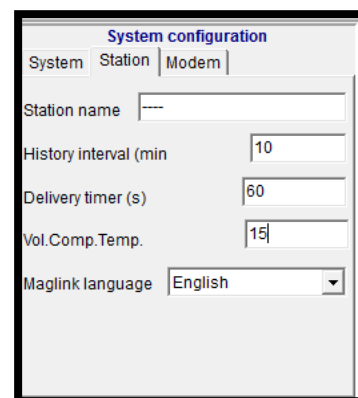
Total channel	Write the total number of channels from 1 to 16.
Total fuel	for future use
Total slave	for future use
Total sensors	number of sensors ON-OFF used for man-hole, sump, It is possible to connect up to 16 sensors ON-OFF on the bus. Please pay attention on the maximum connection capacity on a single barrier.
Protocol type:	Protocol type enabled on the RS232 for management system connection. Common available protocols are: GILBARCO, TOKHEIM, PIGNONE, TOPLEVEL, Probe emulation, RETALIX, DIALOG, ORPAK, TOREX, TLG-SMITHS



Probe resolution (mm/inc)	Parameter used for leakage detection. Modify this parameter if false alarms occur.
DVD sleep time (min)	for future use
Unit of measure	millimeters-liters or inches-gallons

STATION

Station name	write the name of the station.
History interval (min)	Elapsed time for historical writing on the Micro SD card (if inserted into the console). All data, alarms, movements, delivery, leakage are written into a txt file inside the SD card internally located. Configure at 10 minutes in order not to have too many data to be managed which could cause an excessive slow down.
Delivery timer (S)	Linked to delivery liter/gallons parameter, configure at 60 secs to have liter/min in calculation.
Vol. comp. temp.	temperature for calculation of the compensated volume. The default value is 15.
MAGLINK language	select the console language.



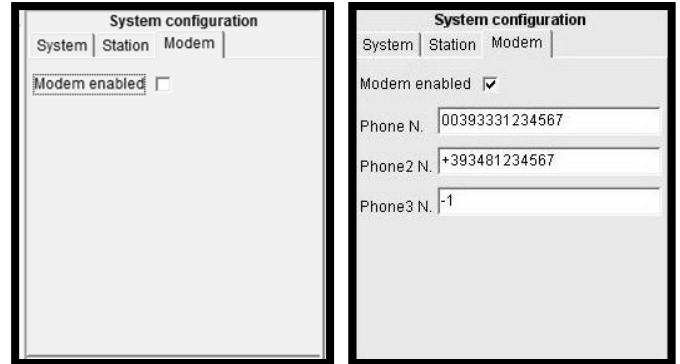
MODEM (option available on request)

Modem enabled activate it only if a GSM modem has been installed.

Phone number configuration for SMS

It is possible to select up to 3 telephone numbers to which address the following alert messages:

- console startup
- delivery parameter
- leakage parameter
- change tank status (alarms H, HH, L, LL, Water) both for enabled and disabled alarms



IMPORTANT!: write the mobile phone number complete of the area code without spaces.
Example: +393331234567 or 00393331234567

Connection of the GSM modem

Basic operations:

1. Disable the PIN code from the SIM card before insert it into the modem.
2. Insert the SIM card into the dedicated slot of the modem
3. Power on the console and wait some time to allow to the modem to connect to the GSM network. When connected the GSM signal depth will appear on the display of the console.

The GSM modem will automatically send the alarm messages listed above when occur.



Sending SMS to the console

The text of the message sent to the console must include only 3 characters.

Important:

- Always write "T" in capital letter
- Always write "0" before the number of the tank from 1 to 9 (for example 01 for tank 1)

T00: shows the status of all connected tanks.

Txx: xx refers to the number of the tank (for example T01) and shows the status of a specific tank.

The console will answer to this message showing the reported values.

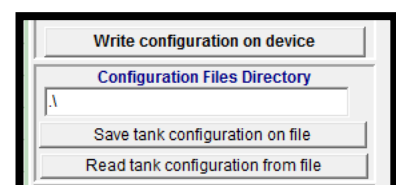
Examples:

KIOSK TEST - WARNING.
SYSTEM RESTARTED

T03
KIOSK TEST
Benzina 3
NO Alarm
Prd: 2987.0 mm
Vol: 24870 l - 71.1%
H2O: 0 mm
T: +15.0

T00
KIOSK TEST
TANK - 01
NO Alarm
Prd: 1380.4 mm
Vol: 4578 l - 90.7%
H2O: 0 mm
T: +18.7
KIOSK TEST
Serbatoio 2
NO Alarm
Prd: 2514.9 mm
Vol: 20149 l - 57.6%
H2O: 0 mm
T: +15.0
KIOSK TEST
Benzina 3
NO Alarm
Prd: 2514.9 mm

WRITE CONFIGURATION ON DEVICE: allows transfer the information that have been configured into System Configuration section of the software.

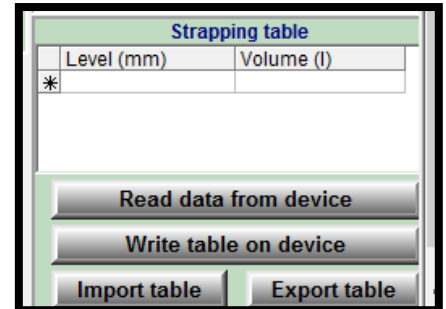


STRAPPING TABLE

The console has the facility to calculate the volume starting from the height as linear interpolation between two near points. In order to do that operation the strapping table (correspondence mm – lt) must be downloaded into the console.

It is necessary to follow few rules in order to download correctly the table into the console:

- Values in **millimeters/inches** and liters/gallons
- Maximum number of points: **250**
- Numbers with decimals have to be written with a dot (.) and not with a comma.
- Table has to be written in Excel or Note Pad and saved as **.csv** or **.txt**.



The .csv format allows to save the data filled into the Excel table separating them with semicolon symbol (;).

Opening .csv file with Note Pad it will be possible to read data as per the example shown below. Otherwise it is possible to complete the table manually into program Note Pad separating the values with semicolons.

The strapping table cannot be modified once imported into Console Config.

READ DATA FROM DEVICE read the current table from the console for the selected channel.

WRITE TABLE ON DEVICE download the table referred to the selected channel, which is shown into the above window.

IMPORT TABLE import .txt or .csv file. After the download the table must be visible into the above window. If nothing appears it means that an error occurred into the file format.

EXPORT TABLE import .txt or .csv file.

Perform this operation for each channel.

It is possible to import the same strapping table for the other channels.

Examples of strapping tables:

	A	B
1	0	0
2	10	19
3	15	28
4	20	37
5	25	53
6	30	68
7	35	86
8	40	104
9	45.5	125

```
0;0
10;19
15;28
20;37
25;53
30;68
35;86
40;104
45.5;125
```

.csv

.txt

PCB SLAVE RELAY CONFIGURATION

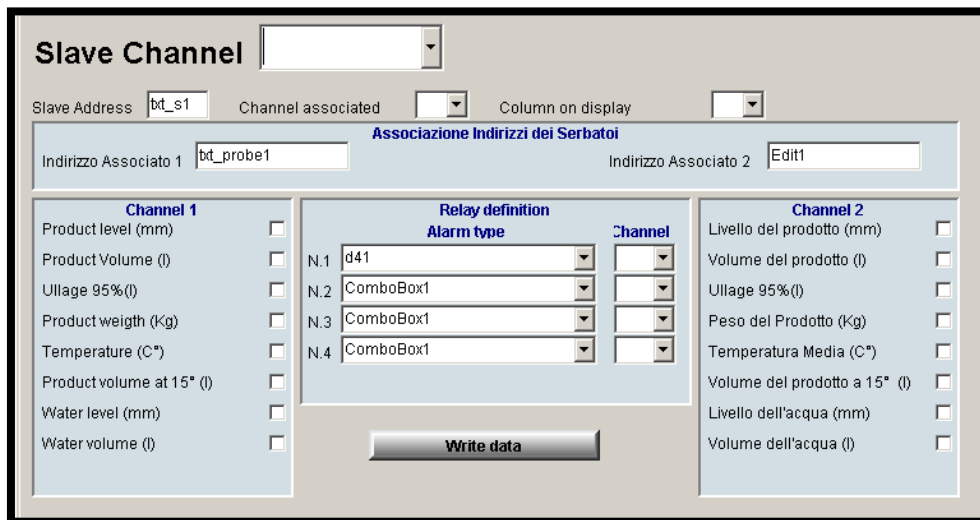
It is possible to choose between two types of PCB slave relay cards:

- ATEX slave card with display having 2 lines with 16 characters each one
- Standard slave card with display having 2 lines with 20 characters each one

Each card during the configuration can be associated to one or two tanks depending on how many relays are required to manage the alarm of that tank.

Here below the configuration windows of a single relay card.

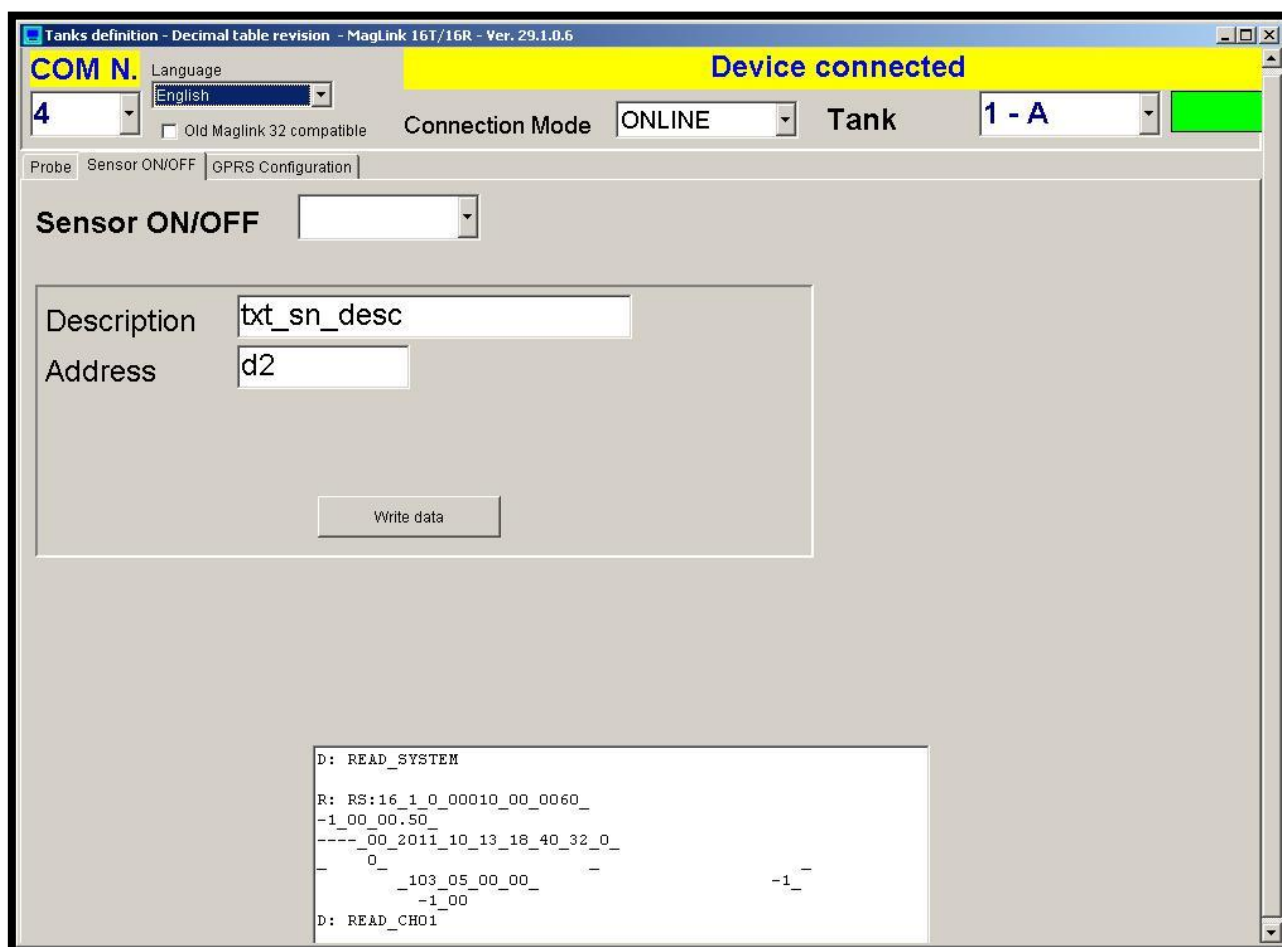
A maximum of 4 slave displays can be configured.



- **Slave address** address of the relay card that appears on the display during the start-up. Please refer to the manual of the relay card to set the address. It is not possible to have two boards with the same address connected on the bus, otherwise generalized transmission errors may occur.
- **Number of associated channels** the relay card can be associated to one or two channels (probes) depending on the requirements.
- **Number of columns on the display** 16 or 20 characters as explained above.
- **Associated address 1** select the address of the probe that has to be associated to the first channel of the relay card.
- **Associated address 2** select the address of the probe that has to be associated to the second channel of the relay card. In case the number of associated channels is 1, this setting is overlooked.
- **Channel visualization 1** if relay boards are equipped with a display, choose the lengths referred to the first channel to be visualized. If the board is one channel configured, both lines on the display are used for that channel and lengths are shown cyclically. If the board is two channels configured, the top line will show the lengths referred to the first channel and the bottom line will show the lengths referred to the second one. If more lengths are selected, they will be shown cyclically.
- **Channel visualization 2** if relay boards are equipped with a display, choose the lengths referred to the second channel to be shown. If the board is one channel configured, these settings will be ignored.
- **Relay definition** 4 relay present on the board can be configured freely. The alarm thresholds can be defined into the alarm configuration.
 - **Alarm type** select alarm type for relay activation.
 - **Channel** select the channel to whom the relay will be associated.
- **Write data** save the changes made.

ON-OFF SENSOR CONFIGURATION

This section allows to configure up to 16 on-off sensors connected on the same bus of the probe.
Here is available the sensor number configured into the System Configuration at section Sensor number.



Tanks definition - Decimal table revision - MagLink 16T/16R - Ver. 29.1.0.6

COM N. 4 Language English Device connected

Old Maglink 32 compatible Connection Mode ONLINE Tank 1 - A

Probe Sensor ON/OFF GPRS Configuration

Sensor ON/OFF

Description txt_sn_desc

Address d2

Write data

```
D: READ_SYSTEM
R: RS:16_1_0_00010_00_0060_
-1_00_00.50_
---_00_2011_10_13_18_40_32_0_
0_
_103_05_00_00_ -1_
-1_00_
D: READ_CHO1
```

Select the sensor to be configured, write the description that will appear on the display and sensor address.
Be sure that their addresses are unique and that the maximum capacity of the barrier to which the sensors are connected is not exceeded.

USER PANEL

The user panel has 6 keys:

UP

LEFT

RETURN / ESC

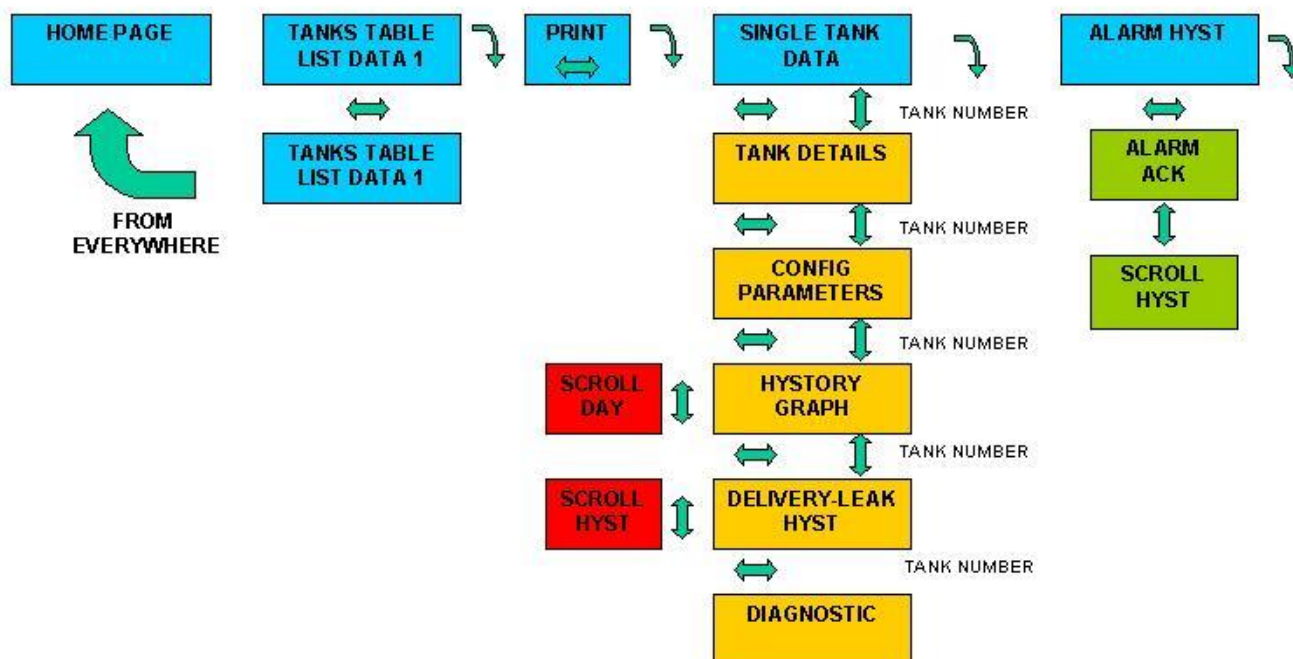


DOWN

RIGHT

ENTER

These are soft keys, for each key pressed a beep is alerted.

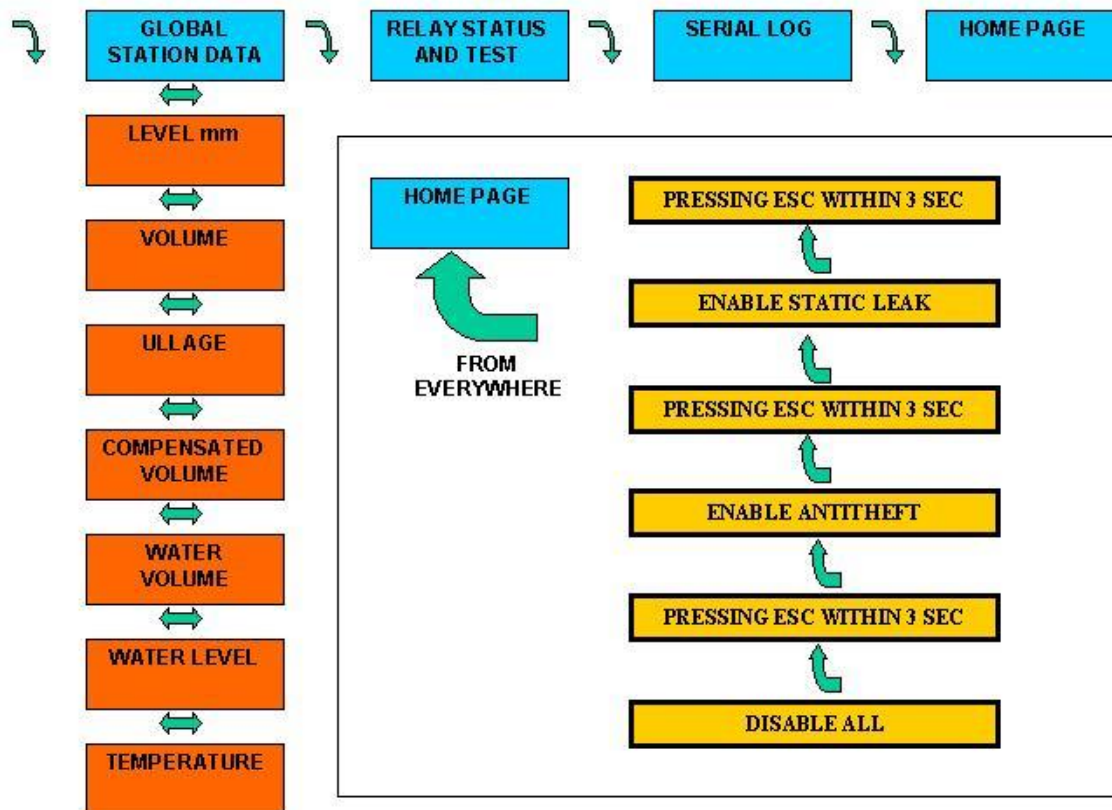


SOFT KEY
LEGENDA

←→ LEFT OR RIGHT
↑↓ UP OR DOWN

↵ ENTER

↶ RETURN



SOFT KEY LEGENDA



LEFT OR RIGHT



UP OR DOWN



ENTER



RETURN

DISPLAY PAGES

HOME PAGE

The first page will be displayed for few seconds at power up, showing the main system information such as:

- Firmware version
- Total number of channels enabled
- Number of configured slaves
- Number of ON-OFF sensors enabled
- Selected protocol
- Date and time



In all pages on the top of the display there is a section with some rectangles showing the status of each tank.

Possible colors are:

- White: probe not answering
- Green: no alarm
- Red: grave alarm, check the alarm page showing the typology
- Yellow: not grave alarm, check the alarm page showing the typology
- Violet: leakage alarm occurs.

In all pages on the bottom of the display the following information are shown:

- Page number for reference
- Date and time
- Real time polling cycle
- GSM signal if modem is installed
- Leakage detection if activated
- Anti-theft function if activated

Measurement unit L / MM

LEGENDA:

Addr. = probe address

Lt / mm Prod = product liters / mm

Lt / mm water = water liters / mm

Temp = temperature

H (mm) = float height in mm

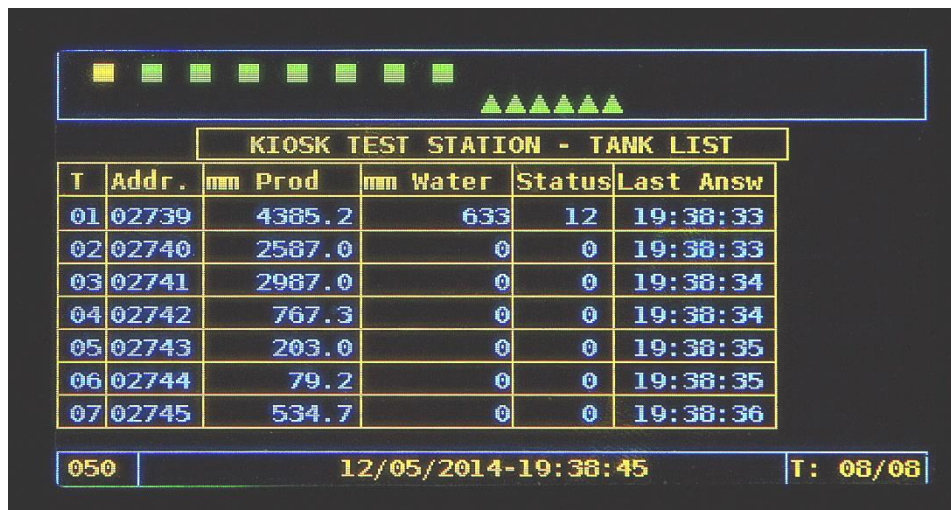
Vol (L) = volume in liters

Ullage = missing liters to reach maximum capacity of the tank

Vol 15 (L) = compensated volume at 15 °C

T (C) = temperature measured by the sensor

After few seconds the console shows the general page where the list of all tanks is displayed.

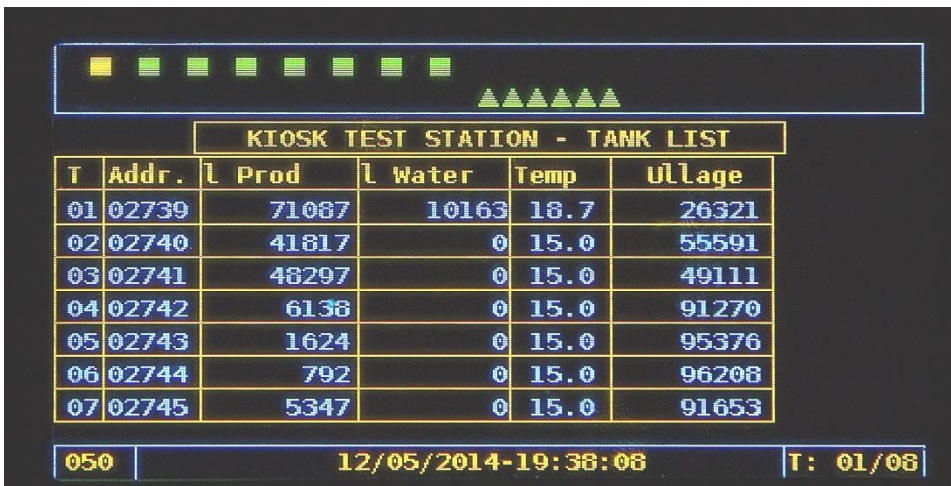


T	Addr.	mm Prod	mm Water	Status	Last Answ
01	02739	4385.2	633	12	19:38:33
02	02740	2587.0	0	0	19:38:33
03	02741	2987.0	0	0	19:38:34
04	02742	767.3	0	0	19:38:34
05	02743	203.0	0	0	19:38:35
06	02744	79.2	0	0	19:38:35
07	02745	534.7	0	0	19:38:36

050 12/05/2014-19:38:45 T: 08/08

Pressing LEFT and RIGHT keys it is possible to switch between pages to see the other values.

Last Answ shows the time in which the last answer from the probe has been received.



T	Addr.	L Prod	L Water	Temp	Ullage
01	02739	71087	10163	18.7	26321
02	02740	41817	0	15.0	55591
03	02741	48297	0	15.0	49111
04	02742	6138	0	15.0	91270
05	02743	1624	0	15.0	95376
06	02744	792	0	15.0	96208
07	02745	5347	0	15.0	91653

050 12/05/2014-19:38:08 T: 01/08

Measurement unit INCHES / GALLONS

LEGENDA:

Addr. = probe address

G / inc Prod = product gallons / inches

G / inc water = water gallons / inches

Temp = temperature

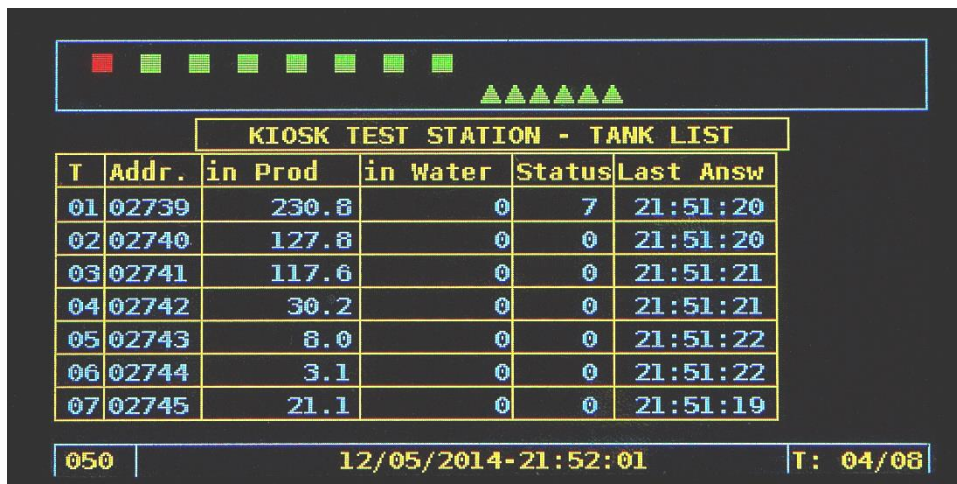
H (inc) = float height in inches

Vol (G) = volume in gallons

Ullage = missing gallons to reach maximum capacity of the tank

Vol 15 (G) = compensated volume at 15 °C

T (C) = temperature measured by the sensor

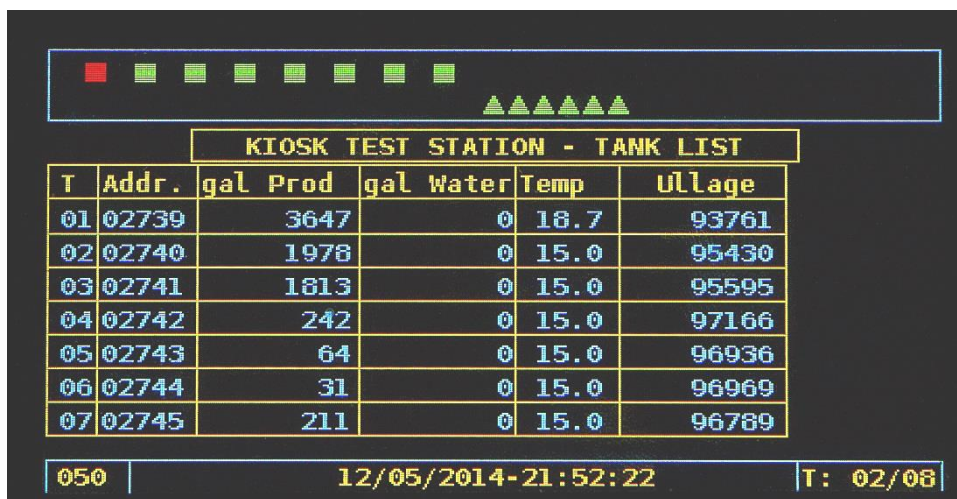


KIOSK TEST STATION - TANK LIST					
T	Addr.	in Prod	in Water	Status	Last Answ
01	02739	230.8	0	7	21:51:20
02	02740	127.8	0	0	21:51:20
03	02741	117.6	0	0	21:51:21
04	02742	30.2	0	0	21:51:21
05	02743	8.0	0	0	21:51:22
06	02744	3.1	0	0	21:51:22
07	02745	21.1	0	0	21:51:19

050 | 12/05/2014-21:52:01 | T: 04/08

Pressing LEFT and RIGHT keys it is possible to switch between pages to see the other values.

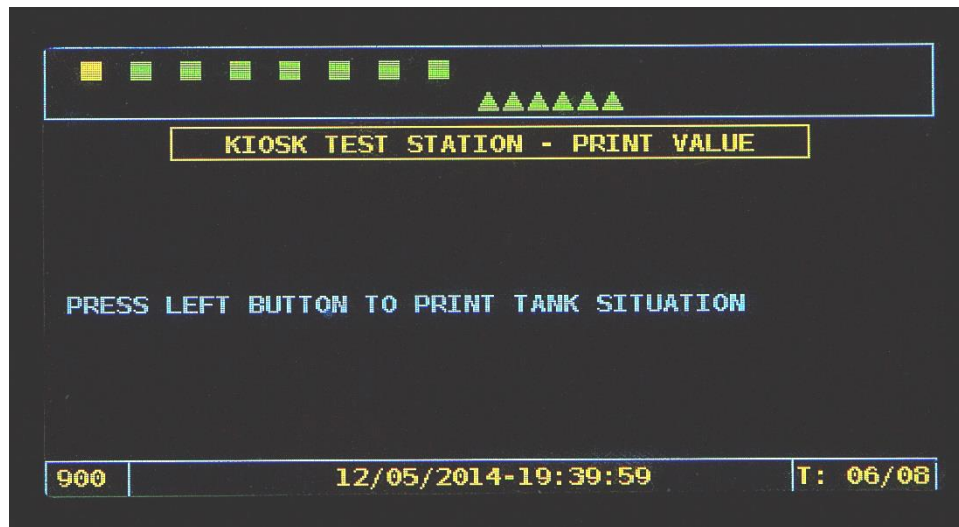
Last Answ shows the time in which the last answer from the probe has been received.



KIOSK TEST STATION - TANK LIST					
T	Addr.	gal Prod	gal Water	Temp	Ullage
01	02739	3647	0	18.7	93761
02	02740	1978	0	15.0	95430
03	02741	1813	0	15.0	95595
04	02742	242	0	15.0	97166
05	02743	64	0	15.0	96936
06	02744	31	0	15.0	96969
07	02745	211	0	15.0	96789

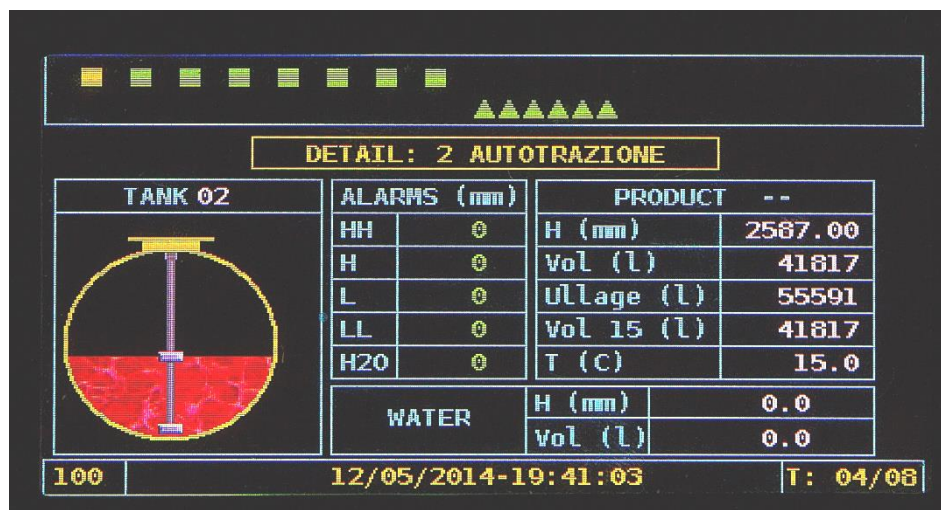
050 | 12/05/2014-21:52:22 | T: 02/08

Pressing ENTER key print page is displayed:



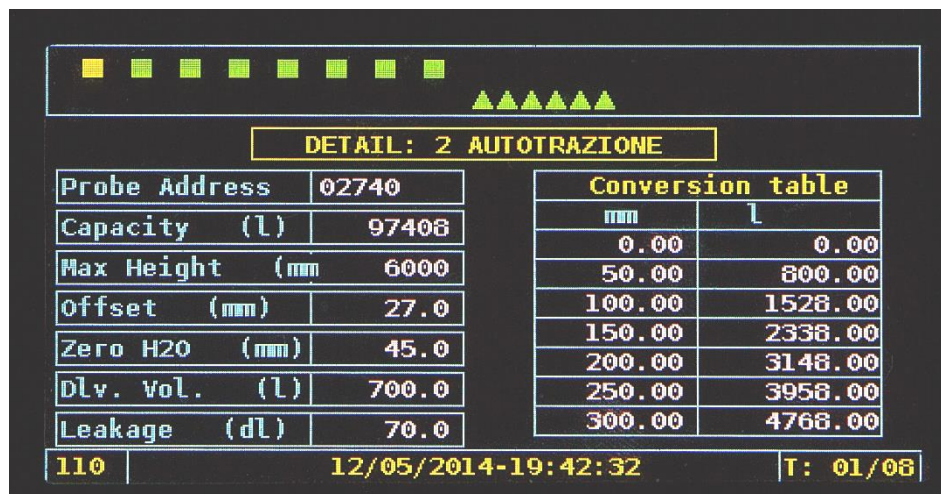
It is possible to print also bringing the 12V on terminal 6 of connector CN10 in case of remote printer management for a maximum distance of 15 meters.

Pressing ENTER key again the page of a single tank is displayed:



Pressing UP and DOWN keys the tanks data are displayed in sequence.

Pressing LEFT and RIGHT keys tank configuration details are displayed.



Pressing UP and DOWN keys it is possible to scroll to display all the 250 linearization points.

Probe Address. = probe address

Capacity (L) = total capacity of the tank

Max Height (mm) = maximum height of the tank

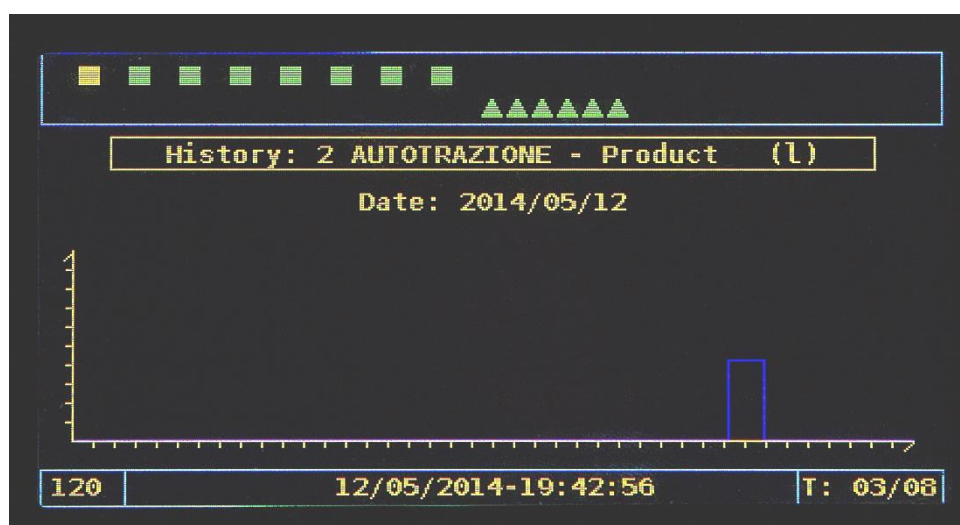
Zero H2O (mm) = zero water

Offset (mm) = difference between dipstick and measure detected by the probe

Dlv. Vol (L) = minimum range value l/min

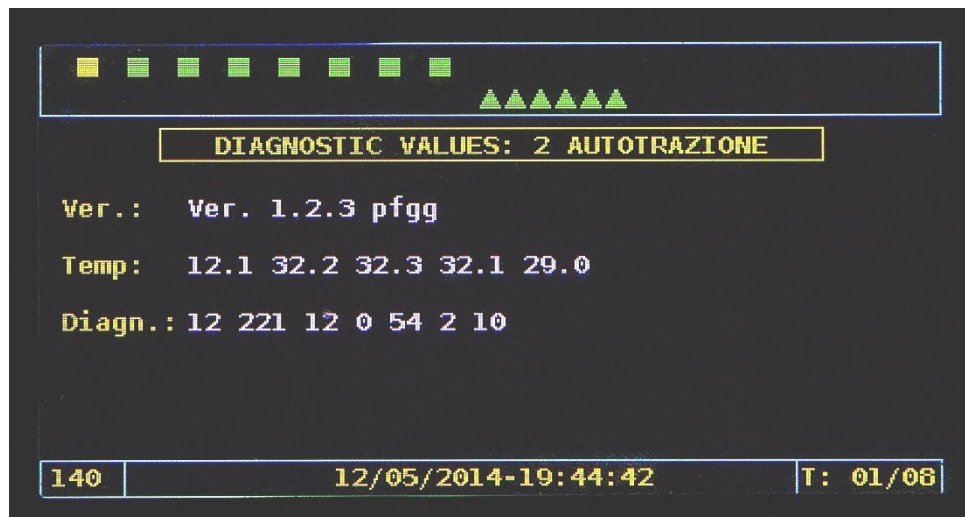
Leakage (L) = leakage

Pressing LEFT or RIGHT keys historical daily tank graph are displayed:



Pressing UP and DOWN the day will be changed.

Pressing LEFT and RIGHT keys probe diagnostics is displayed:



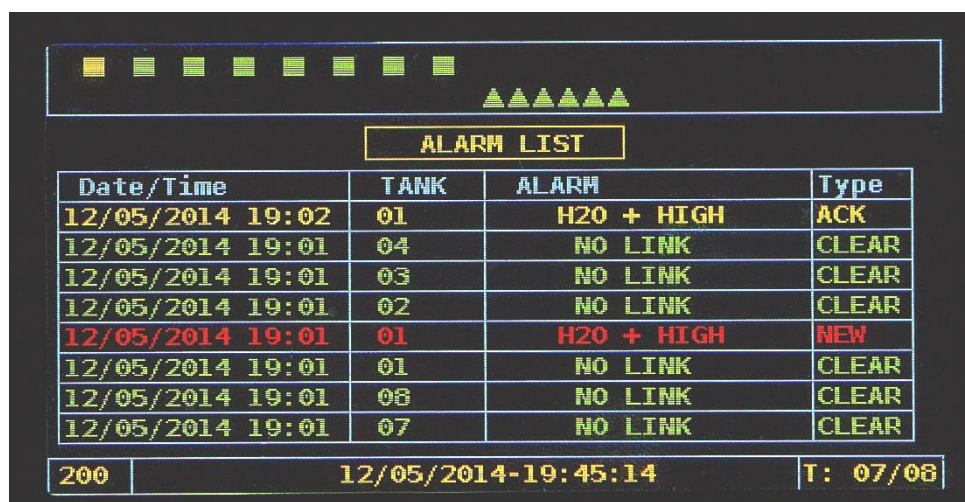
Pressing LEFT or RIGHT keys tank Liter / gallons movement is displayed:

- Delivery are displayed with white lines
- Leakage are displayed with red lines

These data are retrieved from the SD card.



Pressing ENTER key the data history of the alarms is displayed:



When an alarm occurs a discontinuous beep is alerted and the event is stored into the SD card. Alarms need to be acknowledged, pressing ESC key. This action will store the ACK event into the SD card and the sound will be cleared.

If the alarm is restored by itself the beep will finish and the event will be stored into the SD card.

Lines can be of 3 different colors:

- RED: alarm occurs NEW
- YELLOW: alarm acknowledge ACK
- GREEN: alarm cleared CLEAR

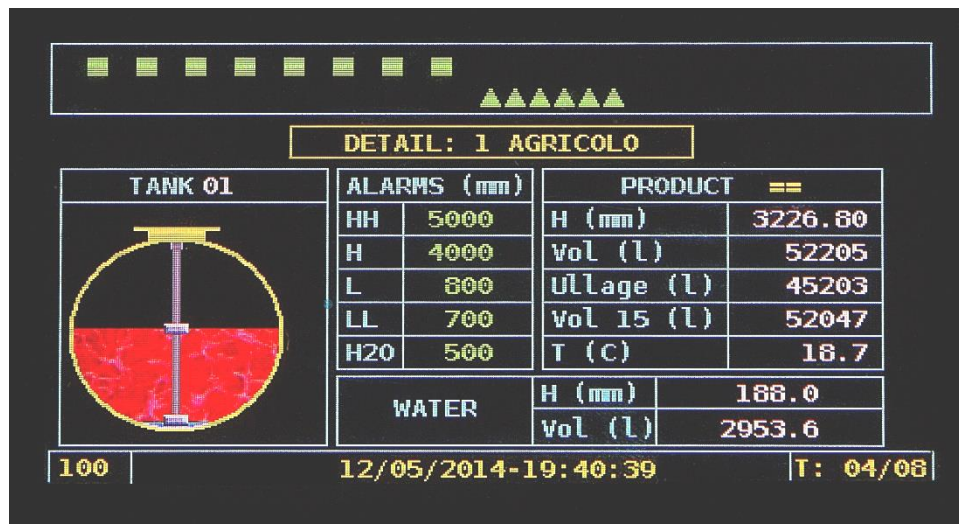
With UP and DOWN keys the alarm list is scrolled showing the last 150 stored alarms.

But there is no limit to the alarm stored into the SD card.

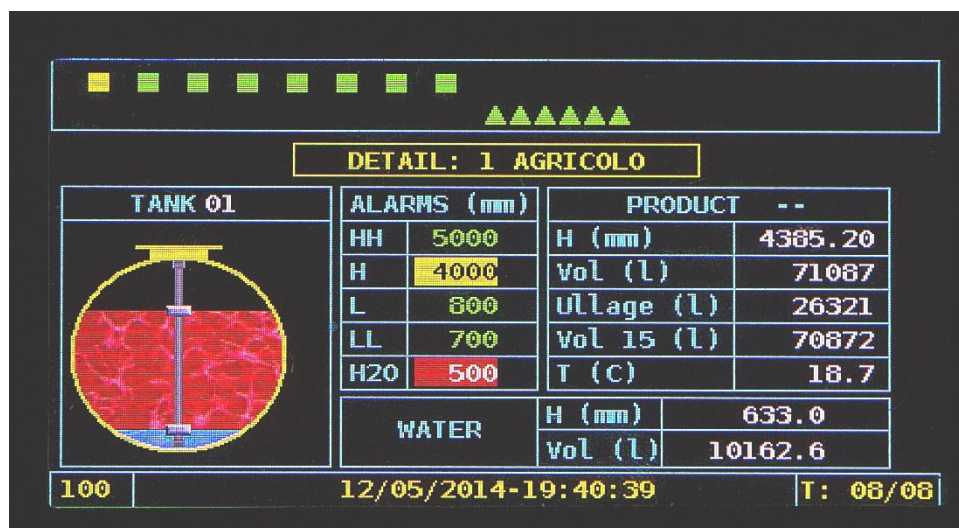
Date, time, tank number, alarm code and status are stored into the SD card.

Alarm codes listed as follow:

01	No Probe Link	Probe not answering, check address or cabling
02	High	Product level is over value H but under value HH if different from 0
03	Low	Product level is under value L but over value LL if different from 0
04	Out of Range	Product level is over the last value of the strapping table. It is not possible to calculate the volume because data are missing
05	Probe	Probe is answering without valid measure. Check floats, bendings
06	High High	Product level is over HH value
07	Low Low	Product level is under LL value
10	Water	Water level is above the set value
00	No alarm	No alarm
12	Water + High	Water alarm + High product alarm combination
13	Water + Low	Water alarm + Low product alarm combination
16	Water + High High	Water alarm + High High product alarm combination
17	Water + Low Low	Water alarm + Low Low product alarm combination



When an alarm occurs into the tank detail display, the alarm field will change background color to show which is the alarm as shown below:



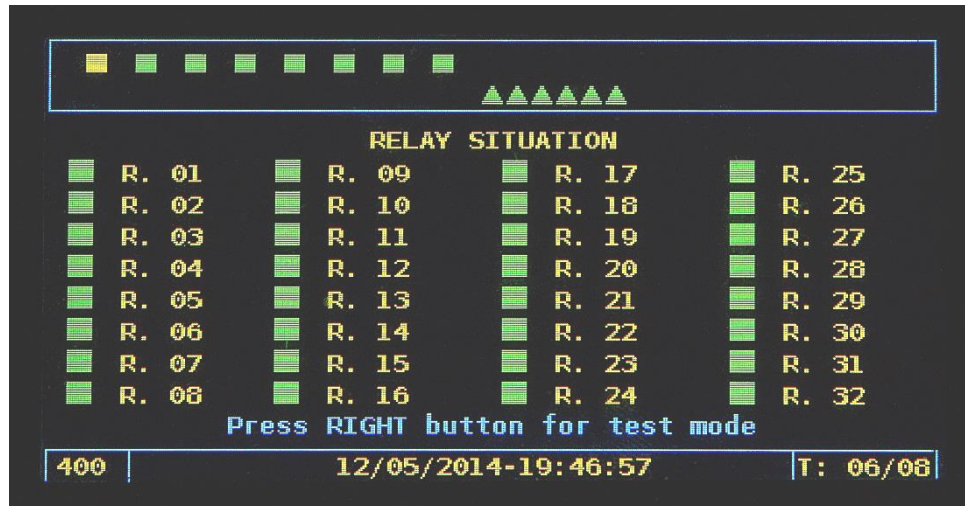
To clear an alarm it is enough to press ESC key. Please pay attention to not activate neither leakage or antitheft.

RELAY TEST MODE

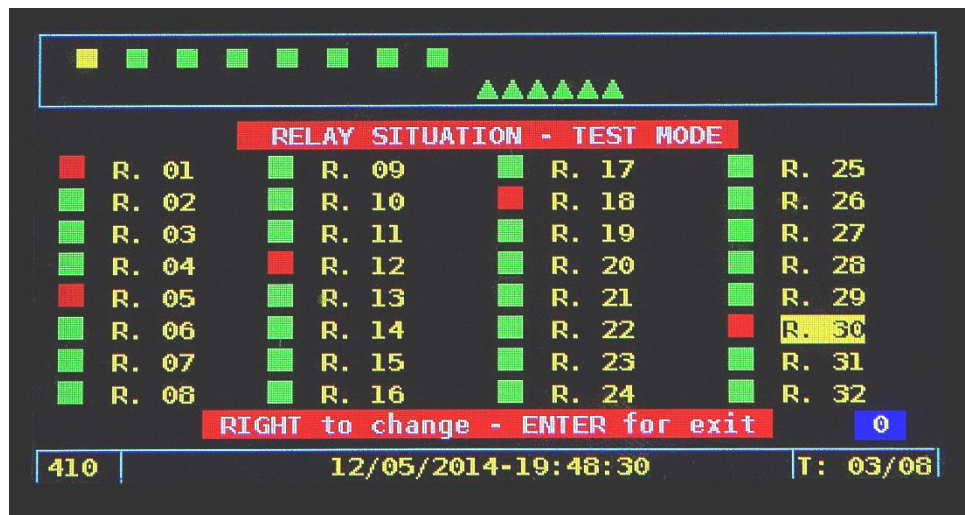
Into this page it is possible to test relay manually to verify the functionality.

Please follow the instructions on the screen.

Relay is RED when activated otherwise it is GREEN when not activated.



Out of this page the relay functions are automatically set back to their normal working.



On the top of the page, if the slave relay card is connected, please verify that information PCB SLAVE RELAY – OK is present.

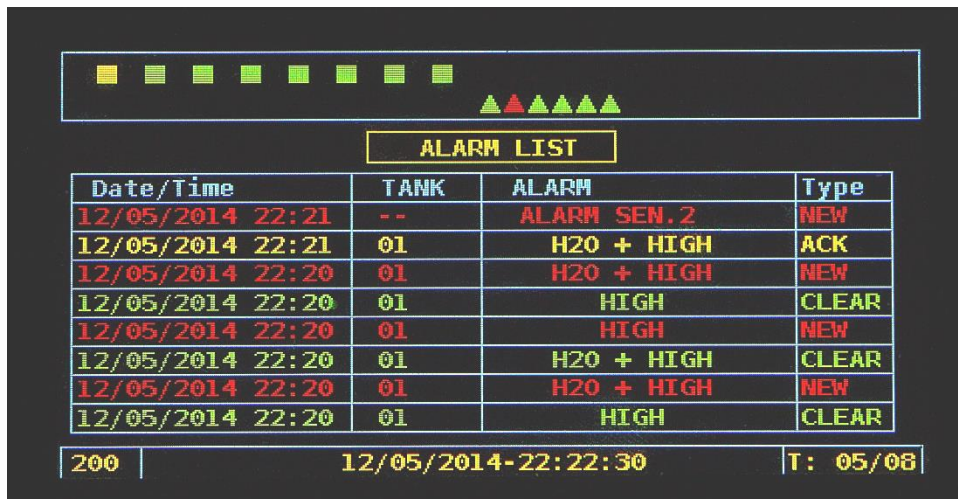
Note: when slave relay card is connected during the installation please check proper communication using Relay test functionality.

EXTERNAL ALARMS

IMPORTANT: be sure to set DIPSW 2 to ON.

Up to 6 external alarms are available.

+12V is needed to activate the alarm. Each alarm is represented by a green triangle which becomes red when the alarm occurs, yellow if acknowledged.



Date/Time	TANK	ALARM	Type
12/05/2014 22:21	--	ALARM SEN. 2	NEW
12/05/2014 22:21	01	H2O + HIGH	ACK
12/05/2014 22:20	01	H2O + HIGH	NEW
12/05/2014 22:20	01	HIGH	CLEAR
12/05/2014 22:20	01	HIGH	NEW
12/05/2014 22:20	01	H2O + HIGH	CLEAR
12/05/2014 22:20	01	H2O + HIGH	NEW
12/05/2014 22:20	01	HIGH	CLEAR

200 | 12/05/2014-22:22:30 | T: 05/08

Press ESC key to acknowledge current alarms.

ON-OFF SENSORS

This page displays the status of the external ON-OFF sensors connected to the console is displayed.



S	Addr.	Descr	Status
01	00015	Pozzetto 1	NO LINK
02	00016	Pozzetto 2	NO LINK
03	00017	Erogatore 1	NO LINK
04	00018	Erogatore 2	NO LINK
05	00019	Pozzetto 3	NO LINK
06	00020	Erogatore 3	NO LINK
07	00021	Pozzetto 4	NO LINK

500 29/02/2012-16:14:14 SE:04/08

The status could be:

NO LINK

OK

ALARM

On the top of the display it is displayed the number of external sensors in alarm so in order to allow to have always the current status available.

If an alarm related to ON-OFF sensors occurs, the number of sensors in alarm is displayed.

A beep is alerted by the console and can be cleared pressing the RETURN button from each page.

STATIC LEAK DETECTION CONTROL

If SD card is not present this function is disabled.

From the home page if UP/DOWN/ENTER keys are pressed in sequence the Static Leak detection is enabled.

To disable press UP/DOWN /ESC keys in sequence from the home page.



Leak detection procedure is based on an algorithm which monitors the tank. It is mandatory that no external movements occur during the activation period.

Result will be available at least after 2 hours after the activation.

If leakage occurs after 2 hours Relay nr. 1 will be activated for 1 second.

ANTI-THEFT DETECTION CONTROL

If the SD card is not present this function is disabled.

Antitheft can be managed through DIPSW3 to allow the activation through the front panel or through the input.

If managed through front panel:

From the home page if LEFT/RIGHT/ENTER keys are pressed in sequence the Anti-theft detection is enabled.

To disable press again from the home page LEFT/RIGHT/ESC keys in sequence.



If managed through the input:

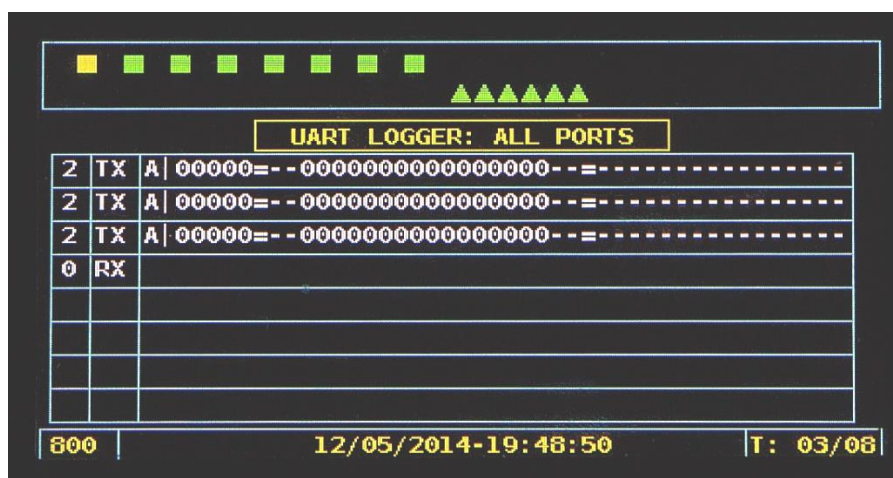
- giving 12V on Input 2 antitheft is enabled;
- giving 0V on Input 2 antitheft is disabled.

This functionality allows to connect the Console to a general existing antitheft system in order to manage activation/deactivation together with the equipment itself.

After 10-15 minutes the system is active and if alarm occurs Relay nr. 1 will be activated for 1 second.

UART LOGGER

This page displays the activity of the serial port for diagnostic purposes.



SAFETY INSTRUCTIONS

"Safety Instruction" attached.

CERTIFICATION



Organismo Notificato n. 1131



- [1] **CERTIFICATO DI ESAME CE DEL TIPO (Al. III)**
EC-TYPE EXAMINATION CERTIFICATE (Annex III)
- [2] **Apparecchio o Sistema di Protezione inteso per l'uso in atmosfere potenzialmente esplosive, Direttiva 94/9/CE**
Equipment or Protective Systems Intended for use in Potentially Explosive Atmospheres, Directive 94/9/EC
CEC 10 ATEX 025 Rev.3
14/2010 - AET637
- [3] **Certificato di Esame CE del Tipo numero**
EC-Type Examination Certificate number
- [4] **Apparecchio o Sistema di Protezione**
Equipment or Protective System **Barriera a sicurezza intrinseca Tipo BRA-SIP, BRA-SI e BRA-2SIP**
Intrinsic safety barrier type BRA-SIP, BRA-SI and BRA-2SIP
- [5] **Costruttore**
Manufacturer **START ITALIANA S.r.l.**
- [6] **Indirizzo**
Address **Via Pola, 6 – 20813 Bovisio Masciago (MB) - Italy**
- [7] **Questo apparecchio o sistema di protezione ed ogni sua variante approvata è descritto nell'allegato al presente certificato e nei documenti descrittivi in esso richiamati.**
This equipment or protective system and any acceptable variation thereto is specified in the schedule to this certificate and the documents therein referred to.
- [8] **Il CEC, organismo notificato n° 1131, in conformità all'articolo 9 della Direttiva 94/9/CE del Consiglio dell'Unione Europea del 23 Marzo 1994, certifica che questa apparecchiatura o sistema di protezione è conforme ai Requisiti Essenziali di Sicurezza e Salute per il progetto e la fabbricazione di apparecchiature e sistemi di protezione destinati ad essere utilizzati in atmosfere potenzialmente esplosive, definiti nell'Allegato II della Direttiva.**
CEC, notified body No. 1131, in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, certifies that this equipment or protective system has been found to comply with the Essential Health and Safety Requirements relating to the design and construction of equipment and protective systems intended for use in potentially explosive atmospheres given in Annex II to the Directive.
I risultati dell'esame e dei test sono descritti nel rapporto confidenziale elencato nella sezione 16.
The examination and test results are recorded in confidential reports listed in section 16.
- [9] **La conformità ai Requisiti Essenziali di Sicurezza e Salute è assicurata dalla conformità alle:**
Compliance with the Essential Health and Safety Requirements has been assured by compliance with:
EN 60079-0: 2012; EN 60079-11: 2012
Nel caso in cui tra le norme tecniche citate fossero presenti norme non armonizzate, la conformità ai Requisiti essenziali in materia di Sicurezza e Salute è comunque stata verificata.
If standards not listed in the list of ATEX Harmonised Standards are used, compliance to the Essential Health and Safety Requirements is verified anyway.
- [10] **Il simbolo "X" posto dopo il numero del certificato indica che l'apparecchiatura o il sistema di protezione è soggetto a condizioni speciali per un utilizzo sicuro, specificate nell'allegato al presente certificato.**
If the sign "X" is placed after the certificate number, it indicates that the equipment or protective system is subject to special conditions for safe use specified in the schedule to this certificate.
- [11] **Questo Certificato di esame CE del Tipo è relativo soltanto al progetto, agli esami ed alle prove dell'apparecchio o sistema di protezione specificato in accordo con la Direttiva 94/9/CE. Ulteriori requisiti di questa Direttiva si applicano al processo di produzione e fornitura dell'apparecchiatura o sistema di protezione. Questi requisiti non sono oggetto del presente certificato.**

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AET_CEC rev.3 2014/04/15 Page 1 of 4

CEC – CONSORZIO EUROPEO CERTIFICAZIONE
Certificato di Esame CE del Tipo
EC-Type Examination Certificate



Organismo Notificato n. 1131

This EC-Type Examination Certificate relates only to the design, examination and tests of the specified equipment or protective system in accordance to the Directive 94/9/EC. Further requirements of the Directive apply to the manufacturing process and supply of this equipment or protective system. These are not covered by this certificate.

[12] **L'apparecchiatura o sistema di protezione deve riportare i seguenti contrassegni:**

The marking of the equipment or protective system shall include the following:

Barriera BRA-SIP, BRA2SIP:



II (1) G [Exia] IIB

FISCO power supply $U_m = 250$ V [Exia] IIB

Barriera BRA-SI:



II (1) G [Exia] IIB

FISCO power supply $U_m = 400$ V [Exia] IIB

Legnano, 18 02 2015



PRD n° 114B ISP n° 071E
Membro degli Accordi di Mutuo Riconoscimento EA, IAF e ILAC
Signatory of EA, IAF and ILAC Mutual Recognition Agreement

CONSORZIO EUROPEO CERTIFICAZIONE
L'ORGANO DELIBERANTE

Il Direttore Tecnico
(A. FUGAZZI)

Il Direttore Generale
(L. TIMOSSÌ)

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Certificato di Esame CE del Tipo
EC-Type Examination Certificate



Organismo Notificato n. 1131

[13]

ALLEGATO – SCHEDULE

[14]

CERTIFICATO DI ESAME CE DEL TIPO n° CEC 10 ATEX 025 Rev.3
to EC-TYPE EXAMINATION CERTIFICATE no. CEC 10 ATEX 025 Rev.3

[15]

Descrizione – Description

Il dispositivo BRA-SIP è una barriera passiva a sicurezza intrinseca per alimentare e scambiare dati con dispositivi siti in zona pericolosa. La BRA-SIP è dotata di un canale per l'alimentazione e di un doppio canale per l'interfaccia RS485.

The BRA-SIP device is an intrinsic safety passive barrier which is used to power and to exchange data with devices in the hazardous zone. The Bra-SIP has a channel for power supply and it has a dual-channel for the RS485 interface.

Il dispositivo BRA-SI è una barriera completamente isolata galvanicamente per alimentare e scambiare i dati con dispositivi siti in zona pericolosa. Un dispositivo tipico è, ad esempio, un trasmettitore di dati di processo con alimentazione a 12 Vdc ed interfaccia RS485.

The BRA-SI device is a completely galvanically isolated barrier which is used to power and to exchange data with devices in the hazardous area sites. A typical device is, for example, a process data transmitter with a 12 Vdc power supply and a RS485 interface.

Il dispositivo BRA-2SIP è una barriera passiva a due canali per alimentare e scambiare dati con dispositivi siti in zona pericolosa. La barriera è costituita da due unità identiche aventi le stessa configurazione della barriera singola BRA-SIP.

The BRA-2SIP device is a dual-channel passive barrier which is used to power and to exchange data with devices in the hazardous zone. The barrier consists of two identical units (UNIT1 and UNIT2) with the same configuration of the single barrier BRA-SIP.

Caratteristiche nominali / Dati Elettrici – Rated characteristics / Electrical data

BRA-SIP e BRA-2SIP:

Alimentazione/Power = 14 Vmax

- Um= 250 V
- Io= 100 mA
- Lo= 1.5 mH
- Po= 0.153 W
- Uo= 14 Vmax
- Co= 3.55 µF
- Ree (5-3) = 15.3Ω

DATA I/O = 6 Vmax

- Um= 6 V
- Io= 100 mA
- Lo= 6 mH
- Po= 0.126 W
- Uo= 6 Vmax
- Co= 40 µF
- Ree (8-1) = 12.6 Ω

BRA-SI:

Alimentazione/Power = 18...25 Vmax

- Um= 400 V
- Io= 100 mA
- Lo= 1.5 mH
- Po= 0.153 W
- Uo= 14.05 Vmax
- Co= 3.55 µF

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Certificato di Esame CE del Tipo
EC-Type Examination Certificate



Organismo Notificato n. 1131

[13]

ALLEGATO – SCHEDULE

[14]

CERTIFICATO DI ESAME CE DEL TIPO n° CEC 10 ATEX 025 Rev.3
to EC-TYPE EXAMINATION CERTIFICATE no. CEC 10 ATEX 025 Rev.3

DATA I/O = 12 Vmax

- Um= 12 V
- Io= 100 mA
- Lo= 6 mH
- Po= 0.126 W
- Uo= 6 Vmax
- Co= 40 µF

Test di Routine / Routine tests

EN 60079-11 §11.1: Routine tests for diode safety barriers

Avvertenze di targa / Warning label

None

[16]

Rapporto numero / Report Number: CEC 14/2010 – RET 001

[17]

Condizioni speciali per un utilizzo sicuro – Special conditions for safe use

Nessuna – None.

L'efficacia e l'affidabilità di questi apparecchi sono garantite seguendo le istruzioni del Manuale d'uso. Non sono ammesse modifiche non autorizzate rispetto al fascicolo tecnico agli atti.

Special conditions for safe use depends on correct following of manufacturer's manual. Further modification are not allowed.

[18]

Requisiti Essenziali di Sicurezza e Salute – Essential Health and Safety Requirements

Nessuno – None. Riguardo ai Requisiti Essenziali di Sicurezza e Salute questo documento verifica la conformità solo agli standard Ex. La dichiarazione di Conformità del Produttore dichiara la conformità con altre Direttive pertinenti.

Concerning EHSR this schedule verifies the compliance with the Ex standards only. The manufacturer's Declaration of Conformity declares compliance with other relevant Directives.

[19]

Documenti descrittivi – Descriptive documents

I documenti di riferimento listati di seguito costituiscono la documentazione tecnica dell'apparecchio o sistema di protezione oggetto di questo certificato. Questi documenti sono confidenziali e sono a disposizione delle sole autorità competenti.

Una copia di questi documenti è conservata presso l'archivio del CEC.

The descriptive documents quoted hereafter constitute the technical documentation of the equipment or protective system, subject of this certificate. This documents are confidential and they are available only to the authorities.
One copy of all documents is kept in CEC files.

Fascicolo tecnico, AR15ExTR001

L'ISPETTORE INCARICATO
Dott. Ing. Giuseppe TERZAGHI

Organo deliberante

Antonio FUGAZZI

Data: 18/02/2015

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NOTIFICATION

CESI



CESI S.p.A.

Via Rubattino 54
I-20134 Milano - Italy
Tel: +39 02 21251
Fax: +39 02 21255440
e-mail: info@cesi.it
www.cesi.it

Schema di certificazione

CESI-ATEX



PRD N. 018B
Membro degli Accordi di Mutuo
Riconoscimento EA, IAF e ILAC
Signatory of EA, IAF and ILAC
Mutual Recognition Agreements

ATEX N 021-1 - 1

NOTIFICATION



[1] PRODUCTION QUALITY ASSURANCE NOTIFICATION

[2] Equipment or Protective System or Component intended for use
in potentially explosive atmospheres
Directive 94/9/EC

[3] Notification number:

CESI 06 ATEX 031 Q

[4] Equipment or component type: Transmitters and level switches
Capacitive sensors for continuous liquid level measurement
and discriminative function for different
Terminal boxes
Magnetostrictive level sensors
Galvanically isolated barriers
Flameproof enclosures "d"
Intrinsic safety "i"
Encapsulation "m"
Dust ignition protection "tD"
Mechanical protection by constructional safety "c"
Dust ignition protection "t"
Pressurization "p"

Protection concepts:

[5] Applicant: START Italiana S.r.l.
via Pola, 6
20813 Bovisio Masciago - MB

[6] Manufacturer: START Italiana S.r.l.
via Pola, 6
20813 Bovisio Masciago - MB

[7] CESI, notified body n. 0722 in accordance with Article 9 of the Council Directive 94/9/EC of 23 March 1994, notifies to the applicant that the actual manufacturer has a production quality system which complies to Annex IV of the Directive.

[8] This notification is based on audit report n. EX-B5006989 issued the 9/03/2015.

This notification can be withdrawn if the manufacturer no longer satisfies the requirement of Annex IV.

Results of periodical re-assessment of the quality system are a part of this notification.

[9] This notification is **valid until 17/03/2018** and can be withdrawn if the Manufacturer does not satisfy the production quality assurance re-assessment.

[10] According to Article 10 [1] of the Directive 94/9/EC the CE marking shall be followed by the identification n. 0722 identifying the notified body involved in the production control stage.

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Date of 1st issue
17th March 2006

Date of renewal
17th March 2015

Translation issued 17th March 2015

Prepared
Sergio G. Giugno

Verified
Mirko Balaž

Approved
Roberto Piccin

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CESI S.p.A.
Testing & Certification Division

Prot. B5006995

P: 1

Rin: 3



START ITALIANA S.r.l.
Via Pola, 6
20813 Bovisio Masciago (MB)
Tel: +39 0362 – 15.81.465
Fax: +39 0362 – 15.81.464