CONFIGURATION MANUAL



MAGLINK LX



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1 PREFACE

Start Italiana S.r.l. has made every effort to keep this document complete, accurate and updated. With every revision of the console, the corresponding information is periodically added to the document. Start Italiana S.r.l. reserves the right to make unannounced improvements and/or changes in the product and/or associated programs. Start Italiana S.r.l. is not liable for damages of any kind, including those resulting in the document, including typographical errors.

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2 GENERAL WARNINGS

Before working on this equipment, please carefully read this instruction in this manual.

Authorised and trained personnel must perform configuration changes and updates.

The manufacturer is not responsible for any operation performed which is not covered in this manual.

Any tampering with the equipment and software relieves the manufacturer of any responsibility in regards to competent bodies.

In case of failure or defect, refer to an authorized service provider or manufacturer directly.

The manufacturer accepts no responsibility for any injury and/or damage to persons and/or property and/or pets caused by failure to follow instructions relating to safety.

Qualified and trained staff must have an understanding of the safety requirements mentioned in this manual, the user manual and in the installation manual.

In case of doubt concerning the operation of the equipment refer to an authorized service provider or manufacturer directly.

3 INTRODUCTION

This manual has been prepared in accordance with IEC 82079-1 standards "Preparation of instructions for use - Structuring, content and presentation - Part 1: General principles and detailed requirements" and according to the ATEX Directive 94/9/EU concerning equipment and protective systems intended for use in potentially explosive atmospheres.

The manual provides necessary information on using a Maglink LX console.

The following table lists the symbols used in the document:

Symbol	Description
	ATTENTION: Important information and notes regarding operations and use considerations
	IMPORTANT: Danger to persons (including death), to property or to the environment

The following table lists reference data of the manufacturer:

Data	Description				
Name	START ITALIANA S.r.l.				
	Via Pola 6				
Address	20813 Bovisio Masciago (MB)				
	Italia				
Telephone	+39 0362 1581465				
Fax	+39 0362 1581464				
Website	www.startitaliana.it				
e-Mail	support@startitaliana.it				



ATTENTION: This manual must be used in conjunction with safety instructions:



IMPORTANT: Console installation should be performed by qualified personnel, as shown in the Installation Manual and according to safety instructions

The Maglink LX console complies with the requirements of Directive 2012/19/EC on waste of electrical and electronic equipment (WEEE) and hence displaying the according symbol:

IMPORTANT: The crossed out wheelie bin symbol indicates that the product must be disposed at the end of its useful life with household waste and must be brought to a collection point for electrical and electronic equipment

ATTENTION: The units of measurement contained in this manual refer to a specific choice by the user himself/herself. You can set the measurement units in a different way (see Section 6.1 of this manual)

The Web Console Config is a web application installed on Supra Linux Apache Web Server operating system distributed with each MagLink LX. The web application is designed to configure and set parameters in the console. In addition, you can also display a variety of information:

- The status of all connected tanks
- Historical data collected
- Current and previous alarms

- The data on the shift report
- Reconciliations
- Delivery and losses

To access the application you must know the IP address of the console (default: 192.168.1.209) and type it into a browser (for example, Mozilla Firefox, Google Chrome, Internet Explorer, etc.).

The following figure shows the home page of the Web Console Configuration:, as a first step, you need to select the display language:



The possible display languages are as follows:

Bosnian	Czech	Hungarian (Magyar)	Romanian	Slovenian
Bulgarian	English	Italian	Russian	Spanish
Chinese Simplified, Chinese Traditional	French	Polish	Serbian (Cyrillic and Latin)	Turkish
Croatian	German	Portuguese	Slovakian	Ukrainian

After selecting the language, press the "Select" button and the application displays the login page.

4 LOGIN PROCEDURE

The following image shows the "Login Page":

Login	[11/02	/2016 12.08.58]
		Guest Admin
		Password Login

You can login as a "Guest" user or as an "Admin" user (The user has permission to access configuration pages to obtain common parameters and system parameters relating to the system setup). The following table shows the data displayed depending on the type of log on access:

Accessible data	Guest	Admin
Level of the connected probes	Х	Х
Historical Data Table	Х	Х
Alarm status	Х	Х
Delivery/Losses	Х	Х
Login	Х	Х
Logout	Х	Х
Association of alarm to relays (per tank)		Х
Managing internal and external sensors		Х
Automatic print features		Х
Definition and insertion of strapping table (per tank)		Х
Configuring email address book		Х
rel of the connected probes torical Data Table irm status livery/Losses gin gout sociation of alarm to relays (per tank) anaging internal and external sensors itomatic print features sfinition and insertion of strapping table (per tank) nfiguration of all dispensers 2P/IP address configuration tilty operations (Backup/restore, Clean historical data: Historical readings, alarms, reconciliation, shift reports, puch screen calibration of the console; Restarting the console, Restarting the operating system of the console) econciliation (if enabled) nift report with scheduling onfiguration internal/external sensors ensors current status Modem configuration rint stock at predefined time of the day		Х
TCP/IP address configuration		Х
Utility operations (Backup/restore, Clean historical data: Historical readings, alarms, reconciliation, shift reports, Touch screen calibration of the console: Bestarting the console, Bestarting the operating system of the console)		х
Reconciliation (if enabled)		х
Shift report with scheduling		Х
Configuration internal/external sensors		Х
Sensors current status	Х	Х
Modem configuration		Х
Print stock at predefined time of the day		Х

By accessing the application as "Admin" user you can perform configuration changes and navigate between pages.

The following table shows the default passwords corresponding to the different types of login access:

Login access	Password
Guest	GUEST-LX
Admin	MAGLINK-LX

You can only change the password by logging in as "Admin."



ATTENTION: The administrator must change the password as soon as possible to prevent unauthorized access



ATTENTION: Please be aware that the password is case sensitive

All configuration data can be changed only after you have logged in as "Admin." The user must select the type of login access: "Guest" or "Admin" enter password and press the "Access" button.

5 BASIC FUNCTIONS

Once logged in you must enter the application, all pages have the same format. Menu items and user accessibility is displayed in the main menu at the top of the page as shown in the following examples:

Log on as "Guest": Main menu

History	Alarms Delivery/Leakage	Reconciliation	Current status	Sensor status	Login	Logout	ProGauge
Current status - (Guest user)	[11/02/2016 12.11.21]		Web.2	.3.23 - LX.2.3.12	(2.3.9) sn.	580028	5

Log on as "Admin": Main menu



The following items are always present:

- Menù buttons on every pages
- Logo (Returns you to the home page)
- Name of the current page
- Type of access ("Guest" or "Admin")
- Current date or time
- Web versions, console and serial number

From any page you can go to home page to change language for web application simply by clicking on the logo displayed after the last main menu button. The name of the page you are on is displayed on the top left.

All configuration data can be modified after you have logged in as "Admin" user. To access the user must select the access type, "Guest" or "Admin," enter your password and press the "Login" button.

Parameter changes are committed to the console only after pressing the "Apply configuration" button present in all pages.

6 CHANGE PASSWORD

The first thing to do is change the password for both "Guest" and "Admin" users. Only the "Admin" user can make password changes.

Apply the following procedure:

Step	Description					
1	Login as "Admin"					
2	Press "Login" on the main menu					
3	tep Description 1 Login as "Admin" 2 Press "Login" on the main menu 3 It opens the "Login" page with the ability to change your password: 3 It opens the "Login" page with the ability to change your password: 4 Press the "Change password" button 5 Type the current password and the new password then press the "Confirm" button: 5 Type the current password and the new password then press the "Confirm" button: 6 It eapplication displays the result of the operation, displaying one of the following messages: 6 It eapplication displays the result of the operation, displaying one of the following messages: 6 It eapplication displays the result of the operation, displaying one of the following messages:					
4	Press the "Change password" button					
5	Type the current password and the new password then press the "Confirm" button:					
6	The application displays the result of the operation, displaying one of the following messages:					
7	password. In the event that you are no longer able to recover the current password follow the procedure for resetting passwords.					

7 THE "GUEST" AND "ADMIN" PAGES

7.1 History

The following image shows the "History Page":

History - (Ad	dmin user) [11/02/2016 1	2.54.49]						
Year/Month 2016-02 V Day 11 V Tank All tanks V Display tank histor							history 🛛 💽		-
Time	Tank	Product height (mm)	Water (mm)	Temp.°C	Volume (liters)	Water volume (liters)	Density	Volume comp. (liters)	Status
09.51.37	01	310.50	20.82	19.2	22356	1499	0.0000	22279	Status OK
09.52.37	01	310.50	20.83	19.2	22356	1500	0.0000	22279	Status OK
09.53.37	01	310.50	20.83	19.2	22356	1500	0.0000	22279	Status OK
09.54.37	01	310.50	20.82	19.2	22356	1499	0.0000	22279	Status OK
09.55.37	01	310.50	20.82	19.2	22356	1499	0.0000	22279	Status OK
09.56.37	01	310.51	20.82	19.2	22357	1499	0.0000	22280	Status OK
09.57.37	01	310.50	20.83	19.3	22356	1500	0.0000	22277	Status OK
09.58.37	01	310.50	20.82	19.3	22356	1499	0.0000	22277	Status OK
09.59.37	01	310.50	20.83	19.3	22356	1500	0.0000	22277	Status OK
10.00.37	01	310.50	20.82	19.3	22356	1499	0.0000	22277	Status OK
10.01.37	01	310.51	20.82	19.3	22357	1499	0.0000	22278	Status OK
10.02.37	01	310.51	20.82	19.3	22357	1499	0.0000	22278	Status OK
10.03.37	01	310.51	20.82	19.3	22357	1499	0.0000	22278	Status OK
10.04.37	01	310.50	20.82	19.3	22356	1499	0.0000	22277	Status OK
10.05.37	01	310.50	20.82	19.4	22356	1499	0.0000	22276	Status OK
10.06.37	01	310.50	20.82	19.4	22356	1499	0.0000	22276	Status OK
10.07.37	01	310.50	20.82	19.4	22356	1499	0.0000	22276	Status OK
10.08.37	01	310.50	20.82	19.5	22356	1499	0.0000	22274	Status OK

The page contains the saved data at regular intervals in a log file for future analysis. You can select from the following filters:

- Year/Month
- Day
- Tank

Pressing the button "Display tank tank" displays the data with the considered filters.

The button allows you to download data in Excel CSV format; the downloaded file contains all the information of the selected day.

7.2 Alarms

The following image shows the "Alarms Page":

Alarms - (Admin user) [11/02/2016 12.56.22]										
Tar	nk All tanks 🔻 Start date	End date Displ	ay alarms							
Date/time	Tank	Alarm	Status							
08/02/2016 08.50.16	11	Status OK	ACK. ALARM							
08/02/2016 08.50.16	11	Status OK	ACK. ALARM							
08/02/2016 08.49.58	01	NOT INITIALIZED	CLEAR							
08/02/2016 08.49.48	01	NOT INITIALIZED	ALARM ON							
08/02/2016 08.49.33	11	Status OK	CLEAR							
08/02/2016 08:49:33		Status OK	CLEAR							
01/02/2016 08.49.18	11	Status OK	ACK. ALARM							
01/02/2016 08.49.18	11	Status OK	ACK. ALARM							
01/02/2016 08.49.18	01	NO LINK	ACK. ALARM							
01/02/2016 08.49.12	01	NO LINK	ALARM ON							
01/02/2016 08.49.08	11	Status OK	ACK. ALARM							
01/02/2016 08.49.08	11	Status OK	ACK. ALARM							
01/02/2016 08.48.51	11	Status OK	CLEAR							
01/02/2016 08.48.51	11	Status OK	CLEAR							
28/01/2016 17.06.39	11	Status OK	ACK. ALARM							
28/01/2016 17.06.39	11	Status OK	ACK. ALARM							
28/01/2016 17.06.06	11	Status OK	CLEAR							
28/01/2016 17.06.06	11	Status OK	CLEAR							

The page shows alarm history. You can select from the following filters:

- Tank
- Start date
- End Date

Pressing the button "View Alarms" displays the data with the configured filters. The alarms are colour coded according to the current state:

- **Green**: For solved alarms
- Yellow: For acknowledged alarms
- Red: For alarms in progress

7.3 Delivery/Losses

The following image shows the "Delivery/Losses Page":

Delivery/perdite -	(Utente consultazio	one) [19/1	0/2015 22.38	.40]			Web	.x.x.x - LX.x.	.x (sn.xxxx	x)
Serbatoio 01		Ora fine		Visua	lizza delivery/perdite	Perdite	Delivery		^	
		Inizio delivery/p	perdite			Fine delivery/p	oerdite			
Ora inizio	Ora fine	Volume (litri)	Volume comp. (litri)	Acqua (mm)	Temp.°C	Volume (litri)	Volume comp. (litri)	Acqua (mm)	Temp.°C	-
2015-10-09 11.44	2015-10-09 11.50	299.7	298.5	0.0	19.7	1508.8	1501.3	0.0	21.1	1
2015-10-02 11.42	2015-10-02 11.48	278.8	277.4	0.0	21.1	1481.5	1474.1	0.0	21.1	
2015-09-25 09.14	2015-09-25 09.20	235.5	234.4	0.0	21.0	1437.8	1430.6	0.0	21.2	
2015-09-22 12.49	2015-09-22 12.55	235.3	233.6	0.0	24.0	1348.4	1338.5	0.0	24.0	
2015-09-07 14.38	2015-09-07 14.44	106.7	105.8	2.0	25.6	1196.3	1185.9	22.0	25.7	
2015-09-07 11.45	2015-09-07 11.51	85.7	84.9	26.0	26.3	1323.1	1312.0	23.0	25.4	
2015-07-10 16.13	2015-07-10 16.19	156.0	154.4	20.0	27.5	624.1	617.8	20.0	27.5	
2015-07-03 15.05	2015-07-03 15.11	157.9	156.0	20.0	29.1	498.1	492.4	20.0	29.1	
2015-06-30 09.35	2015-06-30 11.35	5548.8	5494.7	0.0	27.0	272.4	269.5	0.0	28.0	
2015-06-29 14.47	2015-06-30 09.35	2084.9	2061.3	0.0	29.0	5548.8	5494.7	0.0	27.0	

The page shows the Delivery data (White background colour lines) and related losses (Red background colour lines) as shown in the legend in the upper right corner above the table:



The page shows "Delivery/Losses" history. You can select from the following filters:

- Tank
- Start Time
- End Time

Pressing the button "Delivery/Losses" displays the data with the considered filters. The button allows you to download data to Excel (CSV) the created file contains all the information of the selected filter.

7.4 Current Status

The following image shows the "Current Status" page:

rrent status - (Admin use	er) [11/02/2016 14.	31.17]		
Tank All tanks	1			
Ē.	Tank 1	tank 1	Diesel	
	Product height	310.0 mm		
	Volume	22322 liters	Weight 19085	
	Volume comp. 15°C	22195 liters		Status OK
	Ullage	13678 liters	Density 0.8550	
	Water	20.9 mm		
	Water volume	1504 liters		
11/02/2016 14.30.46	Temperature°C	22.0 °C		

The page allows you to view all the data sent by the probes connected to the console. The following filters are possible:

- All tanks: Data of all tanks is displayed one after the other
- 1, ..., 32: The selected tank data is displayed

The page is reloaded automatically every minute and shows the latest information. You can refresh the page by pressing the F5 key, or by pressing the "Current Status" button from the main menu.

ATTENTION: The displayed data refers to the latest data saved in the history file.	
--	--

7.5 Sensor status

This is the "sensor status" page. User can check current internal/external sensor status.

ensor status - (Admin user) [11/02/2016 12.36.11]					
Туре	Sensor	Status	Status date		
3 - External card Start Italiana S.r.l.	32 - SENSOR 32	ALARM SENSOR	08/02/2016 08.49.26		
2 - Tri-state	10 - SENSOR 10	ØK	08/02/2016 08.49.26		
2 - Tri-state	OS - SENSOR 5	ALARM SENSOR	08/02/2016 08:49:26		
1 - Internal	04 - SENSOR 4	OK	08/02/2016 09.35.33		
1 - Internal	01 - SENSOR 1	OK	08/02/2016 09.35.33		

8 THE "ADMIN" PAGE

8.1 System

The following image shows the "Systems Page":

	т	otal tanks 01 - tank 1	•		Station name	STARTITALIANA	
	Total	dispensers 🚺 🔻			History interval	1 min	
		Total slave 0			Probe resolution	0.5 v mm	
		Total sensor 0			Language	Italiano	•
	Pro	tocol type GILBARCO	(9600,0,7,1) 🔻		Measurement unit	mm / liters 🔹	
		TCP port 8100	Gilbarco protocol over	тср	Date format	dd-MM-yyyy	
	Volume comp. ter	mperature 15 🔻 °C			Debug level	6 🔻	
	1	Auto print 🔲 Shift repo	ort 🔲 Alarms 📃	Delivery 💦 🔲 Leakag	e 📃 Reconciliation 🗍	13.00 ¥ Time	
		fairbanks ID	00 Interval	33 min	Port 21		
		fairbanks ID Server (ftp.v User (progau	00 Interval vetstock.co F ige Pa	33 min Folder ssword	Port 21		
		fairbanks ID Server ftp.v User progau	00 Interval vetstock.co F ige Pa Dipswit	33 min folder ssword en settings	Port 21		
Dipswitch 1: ON	Dipswitch2: ON	fairbanks ID Server (ftp.v User progation Dipswitch3: OFF	00 Interval vetstock.co F ige Pa Dipswitt Dipswitch4: OFF	33 min Solder ssword ch settings Dipswitch5: OFF	Port 21 Dipswitch6: OFF	Dipswitch 7: ON	Dipswitch8: OFF
Dipswitch1: ON DFF: Single Gilbarco	Dipswitch2: ON OFF: Internal inputs NOT available	fairbanks ID Server (ftp.v User (progat Dipswitch3: OFF OFF: No action ON: Input 2 for	00 Interval geventstock.co F ige Pa Dipswitt Dipswitch4: OFF OFF: Normal relay	33 min solder ssword ••••••••••••••••••••••••••••••••••••	Port 21 Dipswitch6: OFF OFF: No action ON: Password	Dipswitch7: ON OFF: No Reconciliation	Dipswitch8: OFF

The page displays system information and parameters applied to all connected probes. The following table lists the parameters that can be set:

Parameter	Description
Total tanks	Number of connected probes (From 1 to 32)
Total dispensers	Number of connected dispensers (From 1 to 32)
Total Slaves	(Reserved for future use)
Sensors	(Reserved for future use)
Protocol Type	Select from among the following: • DIALOG • GILBARCO • DOMS • ORPAK • FUEL POS • PIGNONE
TCP Port	Gilbarco protocol via TCP
Temperature of comp. volume	Selectable values for the calculation of the compensated volume: • 15 °C • 20 °C
Station name	Station name
History range	Time interval between a history saving data ATTENTION: It is highly recommended to set the value to 1 minute
Probe sensitivity	Allow setting the value to 0.5 Allow setting the value to 0.5 ATTENTION: Do not change unless instructed by Start Italiana S.r.l.
Language	Select the language of the console display
Measurement unit	Select from among the following: • mm/litre • inches/gallon • mm/gallon
Date format	Select from the following date formats: • yyyy-MM-dd • dd-MM-yyyy • MM-dd-yyyy
Auto Print	 Select when to perform the following automatic stamp: Shift report, at the beginning and end Alarms, at every status change Delivery, at the beginning and end Losses, upon detection of a loss Reconciliation, set the "Time" for reconciliation

Manual	You can download the PDF of the three manuals regarding the console:				
Manual	• User	Installation	•	Configuration	
Fairbanks	FTP configuration parameters	s used to upload data to Fairbanks servers			

The lower part of the page displays the configuration of the dipswitches.

The following table shows the configuration of the dipswitches:

Dipswitch	Description
1	OFF = Single Gilbarco, ON = Double Gilbarco
2, 3, 5, 8	Not used
4	OFF = Relay in normal mode, ON = Relay in reverse mode
6	Resetting password (Turn off console, switch bit 6 to ON, turn on console, wait for the display cursor in the top left, turn off console, switch bit 6 to Off, turn back on console) ATTENTION: The password reset results in loss of all configuration data, the historical, alarms, delivery and reconciliations
7	OFF = Reconciliation deactivated, ON = Reconciliation activated

8.2 Tank

The following image shows the "Tank Page":

Tank - (Adminuser)	[2016/04/19 10.11.25]			Web.2.4.0 - LX.2.3.21 (2.3.17) sn.580028
		Tank 01 - Diesel 🔻 🗹 Enabled		
Description	Diesel	Alarm HH	0.0	mm
Address	00100	Alarm H	0.0	mm
Product type	Water • Density	1 Alarm I	. 0.0	mm
Total capacity	8073.00 liters	Alarm Ll	. 0.0	mm
Total height	2500 mm	Alarm water	0.0	mm
Offset	30.0 mm	Delta vol	100.0	liters
Zero water	150.0 mm	Delta leakage	200	liters
Probe type	Normal 🔻	Working capacity	90 7 %	
		DVD Settings		
ID	00	Offset 0.0000	Max Co	nfidency 60 T

The page allows you to set the data of each tank; Select from the drop down "Tank," for the tank you wish to work on and then set the parameters listed in the following table:

Parameter	Description			
Enabled	When the flag is active, the application queries the corresponding probe during			
	the read cycle, otherwise the probe is not queried			
Description	Description of the tank			
Address	Address of the probe (no reading from probe in case of incorrect address)			
Product Type	Select the type of product contained in the tank from the list			
Density	Product density, fixed value defined by the product type selection			
Total capacity*	Maximum volume of the product (read-only value)			
Maximum height*	Maximum level of the product (read-only value)			
Offset	Value used to calibrate the position of the product float			
	Possible values: ±30.000 mm			
Zero water	Value used to calibrate the water float			
	Resolution: 1 mm. Maximum value: +30.000 mm			
	Select from the following (This decision impacts the diagnostics display page on			
Probe type	the console, refer to the user manual):			
	Laser probe Logger Normal RF			
Very high alarm, High alarm, Low alarm, Very	Set alarm values relating to different thresholds			
low alarm, Water alarm				
Delta vol., Delta leakage	Set the minimum values to trigger a loss or leakage			
Working Capacity	Set the working capacity for the Ullage calculation			
DVD Configuration	ID, offset and Maximum Confidence probe (Data provided by Start Italiana S.r.l.)			

*This parameter cannot be set, it is taken from the last line of the strapping table (See Strapping Table section); In case of no Strapping Table, it is possible to create a simple one, with only two lines:

mm	0	litres	0	Add row
mm	Maximum height of tank	litres	Maximum volume capacity	Add row

8.3 Strapping Table

The following image shows the "Strapping Table Page":

Strapping table - (Admin user) [09/02/2016 09.03.55]					
Tank 01 - tank 1 🔻 🔀	Validat	e strapping table	Save strapping table Cancel s	trapping table changes	
	- mm	[liters	Add new row	
	Delete	prog.	mm	liters	0
Create table manually		1	0.00	0.00	^
Steps 1 V Total height 500 (mm) Create new strapping table		2	500.00	36000.00	
Import table Browse No file selected. Upload Duplicate table Source tank Target tank O1 - tank 1 V Duplicate	-				~
Apply strapping tables changes					

The Strapping table is used to calculate the volume of the tank, given that each tank has its own shape and its own height.

After selecting the tank from the "tank" drop down, you can enter the information table in three different ways:

- Create table manually: This method allows you to generate a complete linear table where the user must enter the switch from one level to the next. The table is created taking into account the total height of the tank. Press the button "Create new Information Table" the table is generated and displayed on the right side of the page. Only level values are compiled the user must enter the values of the corresponding volume. Once generated the user can add new ones, change existing ones and/or deleting some with discretion:
 - Add: Set the value in mm and litres and press "Add new line."
 - Edit: Set the desired level (mm) and/or the volume (litres) for rows to edit
 - **Delete:** Check the box next to the "Delete" button if you want to delete the entire Strapping table or put a check on lines to be deleted after finishing ticking all the lines press the "Delete" button
- 2. **Import Table**: When you have a Strapping table in Excel (CSV format) you can import it by using the "Choose File" and "Load" button. The table appears on the right side of the page
- 3. **Duplicate table**: It is possible to duplicate the Strapping Table of a tank for other tanks, one tank at a time. The source tank is selected from the "tank" drop-down list. The target tank is selected from the drop down "Destination Tank." Pressing the "Duplicate" button will duplicate the Strapping table from source tank to destination tank. Duplicating a table is saved automatically for the destination tank

Additional buttons on the table:

- Validation of Strapping Table: During data entry you can check the consistency of the data entered by pressing this button in case of error or omission the corresponding lines are shown in bold red
- Save Strapping Table: At the end of any changes press the button to save the data.
- **Cancel changes to Strapping Table**: By selecting cancel changes you can undo all the changes made and start again.

After entering the information table and/or having made any changes to the existing ones press the "Apply changes made to tables" button to take effect, otherwise all changes will take effect the next time you restart the application or the console itself.



ATTENTION: Press the "Save strapping table" button to apply the changes; Otherwise, the changes are lost.



ATTENTION: The strapping table can have a maximum of 500 points

The button allows you to download the "Strapping Table" in an Excel file in CSV format.

8.4 Relays

The following image shows the "Relay Page":

			Tank	01 - tank 1 🔻			
Relay 01	NOT USED	•	Relay 09	NOT USED 🔹	Relay 17	NOT USED	•
Relay 02	NOT USED	•	Relay 10	NOT USED	Relay 18	NOT USED	•
Relay 03	NOT USED	•	Relay 11	NOT USED	Relay 19	NOT USED	•
Relay 04	NOT USED	•	Relay 12	NOT USED 🔹	Relay 20	NOT USED	•
Relay 05	NOT USED	•	Relay 13	NOT USED 🔹			
Relay 06	NOT USED	•	Relay 14	NOT USED			
Relay 07	NOT USED	•	Relay 15	NOT USED			
Relay 08	NOT USED	•	Relay 16	NOT USED V			

Configuring alarm relays, select the tank from the "tank" drop-down list and wait for data to load, then set the desired alarms. Relays can be configured for the following:

- Not used
- No link
- High
- Low
- Out of range
- Probe

- Very highVery low
- Water
- Communication

ATTENTION: When using the DVD, do not use Relay 4 as its used to power the DVD

8.5 Sensors

In this section user can configure internal and external sensors. User must select a sensor type and for each sensor define the alarm status. In addition user can select a relè to combine with each sensor when alarm is active.

You can specify the sensors connected to the console. Select the sensor from the "sensor type" drop-down list and fill in the fields related to sensors. The types of sensors available are as follows:

- Internal: Internal probe (6 sensors)
- Triple-state: Triple-state probe (64 sensors)
- External Card Start Italiana S.r.l.: External card supplied by Start Italiana S.r.l. (up to 32 sensors)

The following image shows the "Sensors" page (Internal sensor type):

Sensors - (Admin user)	[11/02/20	016 12.29.05]								
		Sensor typ	e Inter	nal	,	Save Sensor Configuration	J			
1:	Alarm status	Normally closed 🔻	Relay	NONE V	2:		Alarm status	Normally closed •	Relay	NONE •
3:	Alarm status	Normally closed 🔻	Relay	NONE V	4:		Alarm status	Normally closed 🔻	Relay	NONE T
5:	Alarm status	Normally closed •	Relay	NONE 🔻	6:		Alarm status	Normally closed •	Relay	NONE V

The following image shows the "Sensors" page (Probe type "External Card Start Italiana S.r.l."):

Sensors - (Adminus	er) [11/02/20	016 12.35.07]								
		Sensor typ	e Exte	ernal card Star	t Italiana S.r.l. 🔻	Save Sensor Configuration				
1:	Alarm status	Normally closed 🔻	Relay	NONE •	2:		Alarm status	Normally closed 🔻	Relay	NONE •
3:	Alarm status	Normally closed 🔻	Relay	NONE •	4:		Alarm status	Normally closed •	Relay	NONE •
5:	Alarm status	Normally closed 🔻	Relay	NONE •	6:		Alarm status	Normally closed 🔹	Relay	NONE V
7:	Alarm status	Normally closed 🔻	Relay	NONE T	8:		Alarm status	Normally closed 🔻	Relay	NONE •
9:	Alarm status	Normally closed 🔻	Relay	NONE •	10:		Alarm status	Normally closed 🔻	Relay	NONE V
1:	Alarm status	Normally closed 🔻	Relay	NONE V	12:		Alarm status	Normally closed •	Relay	NONE V
3:	Alarm status	Normally closed 🔻	Relay	NONE T	14:		Alarm status	Normally closed •	Relay	NONE T
5:	Alarm status	Normally closed 🔻	Relay	NONE T	16:		Alarm status	Normally closed 🔻	Relay	NONE •
:	Alarm status	Normally closed 🔻	Relay	NONE •	18:		Alarm status	Normally closed 🔻	Relay	NONE •
): [Alarm status	Normally closed 🔻	Relay	NONE V	20:		Alarm status	Normally closed •	Relay	NONE V
1:	Alarm status	Normally closed 🔻	Relay	NONE T	22:		Alarm status	Normally closed •	Relay	NONE V
3:	Alarm status	Normally closed 🔻	Relay	NONE V	24:		Alarm status	Normally closed 🔻	Relay	NONE •
5:	Alarm status	Normally closed 🔻	Relay	NONE •	26:		Alarm status	Normally closed •	Relay	NONE •
7:	Alarm status	Normally closed 🔻	Relay	NONE V	28:		Alarm status	Normally closed •	Relay	NONE V
9:	Alarm status	Normally closed 🔻	Relay	NONE T	30:		Alarm status	Normally closed •	Relay	NONE T
1:	Alarm status	Normally closed •	Relay	NONE T	32:		Alarm status	Normally closed •	Relay	NONE V

The following image shows the "Sensors" page ("Triple-state sensor type"):

Sensors - (Ad	min user) [11/02/20)16 12.30.12]								
		Sensor type	Tri-sta	ate	•	Save Sensor Configuration				
1:	Alarm status	Normally closed 🔻	Relay	NONE V	2:		Alarm status	Normally closed 🔻	Relay	NONE •
3:	Alarm status	Normally closed •	Relay	NONE •	4:		Alarm status	Normally closed •	Relay	NONE •
5:	Alarm status	Normally closed	Relay	NONE V	6:		Alarm status	Normally closed 🔻	Relay	NONE *
7:	Alarm status	Normally closed •	Relay	NONE V	8:		Alarm status	Normally closed •	Relay	NONE •
9:	Alarm status	Normally closed 🔻	Relay	NONE T	10:		Alarm status	Normally closed 💌	Relay	NONE •
1:	Alarm status	Normally closed 🔻	Relay	NONE V	12:		Alarm status	Normally closed 🔻	Relay	NONE V
.3:	Alarm status	Normally closed •	Relay	NONE •	14:		Alarm status	Normally closed •	Relay	NONE •
5:	Alarm status	Normally closed •	Relay	NONE •	16:		Alarm status	Normally closed •	Relay	NONE V
7:	Alarm status	Normally closed •	Relay	NONE V	18:		Alarm status	Normally closed •	Relay	NONE •
9:	Alarm status	Normally closed •	Relay	NONE T	20:		Alarm status	Normally closed •	Relay	NONE •
1:	Alarm status	Normally closed •	Relay	NONE T	22:		Alarm status	Normally closed v	Relay	NONE •
3:	Alarm status	Normally closed •	Relay	NONE V	24:		Alarm status	Normally closed •	Relay	NONE •
5:	Alarm status	Normally closed •	Relay	NONE T	26:		Alarm status	Normally closed *	Relay	NONE •
7:	Alarm status	Normally closed •	Relay	NONE T	28:		Alarm status	Normally closed 🔻	Relay	NONE V
9:	Alarm status	Normally closed 🔻	Relay	NONE •	30:		Alarm status	Normally closed •	Relay	NONE •
1:	Alarm status	Normally closed •	Relay	NONE •	32:		Alarm status	Normally closed •	Relay	NONE •

8.6 Reconciliation

The following image shows the "Reconciliation Page":

Reconciliation	- (Admin user)	[11/02/2016 12.57	7.59]			
		Year/Month 2016-0	2 🔻 Day 11 🕇 Tank	Display reconcilia	tion 🖂	
Time	Tank	Start vol. (liters)	End vol. (liters)	Vol. diff. (liters)	Dispenser (liters)	Delta vol. (liters)
09	01	22356.0	22356.0	0.0	0.0	0.0
10	01	22356.0	22327.0	29.0	0.0	-29.0
11	01	22328.0	22322.0	6.0	0.0	-6.0

When connected to an FCC (Forecourt Controller) or POS enabled for reconciliation the console receives information on the amount of fuel dispensed. The user can compare the dispensed volume ("Dispenser" column) by the hour, with the difference in volume per hour detected by the probe ("Vol. Diff." column) The result is shown in the "Delta vol." column.



ATTENTION: Reconciliation is not handled during Delivery: The table will not include the corresponding line of the Delivery time

The button allows you to download the "Reconciliation" in an Excel file in CSV format.

Shift report 8.7

The following image shows the "Shift report Page":

Shit	ft schedule 00.00	Delete selected			Time	00.00 Add scl	hedule	
Day 20	016/02/11 🔻	Tank 01 - tank 1 🔻						
		Start va	lues	End va	lues			
ID	Date	Vol. prod (liters)	Vol. comp. (liters)	Vol. prod (liters)	Vol. comp. (liters)	Delivery (liters)	Vol. diff. (liters)	Vol. comp. dif (liters)
								(
001	2016/02/11 00.00	3935.0	3939.2	3935.3	3938.5	0.0	0.0	1

The table shows the start and end of each shift report, select the "Day" and "Tank" values.

You can establish an automatic scheduling of the shift report. From the "Time" drop-down list select one of the options then press the "Add schedule" button.

To delete a schedule select from the "Shift Schedule" drop-down list a schedule and press the "Delete selected" button.

allows you to download the "Shift report" in an Excel file in CSV format. The button

Dispenser Configuration 8.8

The following image shows the "Config. Page": Dispensers":

Fuel config - (Admin user) [11/02/	2016 14.37.36]	
	Dispenser 1 V Nozzles 4 V	÷
Nozzle 1 01 - tank 1 🔻	Nozzle 2 01 - tank 1 🔻	Nozzle 3 01 - tank 1 🔻
Nozzle 4 01 - tank 1 💌	Nozzle 5	Nozzle 6
Apply configuration		

When the console is connected to an FCC or POS enabled for reconciliation configure the dispensers and its nozzle's associating them to the tanks from which they connected. For each dispenser you must define the number of nozzles and the tank it is connected to. Select from the "Dispenser" drop-down list the dispenser, to configure select the number of nozzles connected from the "nozzle" drop-down list, finally for each nozzle select the corresponding tank.

8.9 TCP/IP Connection

The following image shows the "TCP/IP Page":

TCP/IP - (Admin user)	[11/02/2016 14.40.11]	
	Addres	\$ 192 ▼) 168 ▼) 1 ▼) 209 ▼ : 80
	Netmas	(255 ▼), 255 ▼), 255 ▼, 0 ▼
	Gatewa	(192 •), 168 •), 1 •), 1 •)
Apply configuration		

You can access the TCP/IP parameters of the console:

- Address: IP address and communication port to communicate with the configuration application via • a browser (Internet Explorer, Mozilla Firefox, Google Chrome, Opera, etc.)
- Netmask

Gateway



ATTENTION: The parameters of the "TCP/IP" page must be modified carefully; The IP address cannot be assigned to another device or computer of the same network

8.10 Email Configuration

The following image shows the "Config. email Page":

		SMTP cc	onfiguration	settings		
Server	User	Password		Port	SSL	
smtp.server	smtp.user		·	25	🔍 Yes 💿 No	Save SMTP
			Address list			
	(bolla@startitaliana.it	Save r	new email address		
	1	bolla@startitaliana.it gallieni@startitaliana.it	-	1		
			Deleu			

You can send notifications by e-mail. When the console changes state or it enters in Delivery mode an email to the address list is sent.



ATTENTION: Carefully configure the SMTP settings in "SMTP Configuration," then press the "Save SMTP" button

In the "Address List" section, you can add a new e-mail by pressing the "Save new address" button or delete an existing e-mail by pressing the "Delete selected address."

8.11 Print Stock Configuration

The following image shows the "print Stock configuration page":

Print stock - (Admin user) [04/0	5/2016 08.38.12]		Web.2.4.2 - LX.2.4.0 (2.4.0) sn.520003
Print stock schedule	Delete selected	Time 00.00 🔻	Add schedule
		00.00	
		01.00	
		02.00	
		03.00	
		04.00	
		05.00	
		06.00	
		07.00	
		08.00	
		09.00	
		10.00	
		11.00	
		12.00	
		13.00	
		14.00	
		15.00	
		16.00	
		17.00	
		18.00	
		19.00 👻	

In this page it's possible to configure several hours a day for automatic print stock.

A printer has to be connected and Double Gilbarco protocol has to be deactivated

8.12 Modem configuration settings

As option is possible to insert a GSM modem card . It is possible to receive automatic notification or texting an SMS to the modem it will reply with the stock.

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

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

Modem config - (Admin u	ser) [2016/04/19 09.47.00]		Web.2.4.0 - LX.2.3.21 (2.3.17) sn.580028
	м	odem configuration settings	
Mobile number 1	Mobile number 2	Mobile number 3	
			Save modem

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:







8.13 Utility

The following image shows the "Utility" page:

Utility - (Admin user) [11/02/2016 12.33	7.30]
Save date/time to console	2016-02-11 12:37:30 Save
Touch screen calibration	Calbrate
Reboot console application	Rebot application
Shutdown console application	Shutdown application
Reboot console system	Reboot system
Restore factory settings	Restore
Backup/Restore settings	Backup Rezore
Clear data	Alarms History Reconciliation Shift report Clear

The following table lists the parameters on the page that can be set:

Parameter	Description
Update date/time of the console	Change the date/time, paying close attention to the proposed format respecting the locale; Date and time are used to store data in the console; When editing is finished, press "Save"
Touch Screen Calibration	Press the button "Calibrate" in the event of loss of screen accuracy; The following message appears: 34.03] 2015-10-22 18:32:51 Seven Berno appleating Follow the instructions on the console screen, by pressing the indicated position to complete the calibration process. When the procedure ends, the application starts automatically.
Restarting the console program	Press the "Restart application" button
System Reboot	Press the "System reboot" button to reboot the operating system
Shutdown application	Press "Shutdown application" to close application
Reset to factory default	Press the "Reset" button
Configuration Backup/Restore	Backup function - once the console has been installed and configured it is recommended to use this function to create a system back up, please note the system will keep the last back over writing any previous back-ups already made. If a USB stick is present the system will also create a backup on the stick. The restore function takes the data of the previous backup in the console; use the "Restore" button. If the user connects the console to a USB device with a previous backup and then presses the "Restore" button, the procedure searches for the previous backup data in the connected USB device and uses restore to back up if available. If no backup is found in the USB device, data for recovery is taken directly from the console.
Delete data	You can delete the following data: • Alarms • History • Reconciliation • Shift report Select data to be deleted and then press the "Clear" button. • • • • •

9 SUPPORT

If you need direct assistance from a Start Italiana S.r.l. technician's the best solution is to connect the console to the Internet. Configure the router assigning console private IP address to a public IP address of the company, thus opening port 22 for console access and port 80 for web access. In this case the console can then be viewed directly by Start Italiana S.r.l. staff.

An alternative is to use third-party programs (for example, Team Viewer 7 that can be downloaded from our website under the heading Assistance/Support) to allow a connection between remote computer (the console must be connected to the computer to which Start Italiana S.r.l. will connect remotely).

In the case no Internet access is available the user can provide Start Italiana S.r.l. with console data to debug on.

Step	Description			
1	Provide a USB device with at least 50 MB of free space available			
	ATTENTION: The USB device must be formatted according to FAT32			
2	Connect the USB device to a PC			
3	Create a folder on the USB device named "Ix-support" (All in lower case)			
4	Connect the USB device to the console			
5	Press the "INFO" button and access the relevant page			
6	Wait until the "Export Log" appears on the screen and then press it (The files are copied to your device in the console)			
7	Perform a compression of the "Ix-support" folder and send the ZIP file by e-mail to support@startitaliana.it			

The following table shows the necessary procedure steps for the provision of such data:

10 REVISIONS

The following table lists the revisions to the document:

Revision No.	Date	Description	Firmware Revision
01	March 2014	First version	1.0.0
02	February 2015	Reversing the com port	2.0.0
03	March 2015	Addition of an application description section	2.0.0
04	April 2015	Addition of a Certification Section and a Notification Section	2.1.x
05	April 2015	New test reports, certification and notification	2.1.x
06	July 2015	Manual updated procedure, information reconciliation, shift reports, stock printout, sending log information to the media, program description	2.2.x
07	November 2015	Addition of page for probe manager, addition of shift report scheduling, addition of automatic printing features, manual layout revision, updated legends of dip switch	2.3.x
08	January 2016	Translation	2.3.x
09	April 2016	Modem GSM enabled, Working capacity, Auto Print Stock	2.4.0



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