SOCIETÀ COOPERATIVA
BILANCIAI

Entry Diade - Double Weighing
FLYNET

1 Table of contents

2 INTRODUCTION 7

3 CONFIGURING THE INDICATOR 8

3.1 ARCHIVES - CONFIGURING ARCHIVES 8

3.1.1 Parameters of the product archive 8

3.1.2 Parameters of the customer archive 9

3.1.3 Parameters for the plate archive 11

3.1.4 Configuring the automatically assigned data recall archive 12

3.1.5 Configuring master file data recall 13

3.1.6 Configuring preset weight data recall 14

3.1.7 Configuring preset weight 15

3.1.8 Coefficient 16

3.2 OTHER - OTHER CONFIGURATIONS 17

3.2.1 Fields 17

3.2.2 Configuring printer 18

3.2.3 Display 23

3.2.4 Configuring weighing operations 24

3.2.5 Automatically exporting weighing operation archive in csv 25

3.2.6 Package number 28

3.2.7 Excluding columns 29

3.3 INPUTS - Configuring inputs 29

3.3.1 Configuring weighing enabling input 29

3.3.2 Configuring weight reset input 29

3.3.3 Configuring weighing operation input 30

3.3.4 Configuring transmission request input 30

3.3.5 Configuring scale selection input 30

3.4 OUTPUTS - Output configuration 31

3.4.1 Traffic light configuration 31

3.4.2 Output configuration Weighing operation completed 33

3.4.3 Output configuration Transmission Ok 33

3.4.4 Output Configuration Selected Scale 33

3.4.5 Configuring Indicator Ready output 34

3.4.6 Configuring Bilanciai active output 34

3.4.7 Configuring card accepted output 34

3.4.8 Configuring card rejected output 35

3.4.9 Mpp output Configuration execute 35
4 BASIC OPERATIONS 36
4.1 Using the touch screen 36
4.2 Icons 36
4.3 Keys 36
4.4 Configuring a text 37
4.5 Access levels 38
4.5.1 Scale 38
4.5.2 Archives 38
4.5.3 CSV 39
4.5.4 Tools 39
5 ARCHIVES - DATA 40
5.1 Flynet Archive List 40
5.1.1 Product 40
5.1.2 Customer 40
5.1.3 Plate 41
5.1.4 Weighing operations 41
5.1.5 Data recall 42
5.1.6 Master file data 43
5.1.7 PRESET WEIGHTS 43
5.1.8 Coefficient 43
5.1.9 Axles 44
5.1.10 Encoding cards 45
5.1.11 Tare 45
5.2 Managing Archives 45
5.2.1 Creating a new item 45
5.2.2 Modifying an existing item 45
5.2.3 Deleting all items 46
5.2.4 Deleting an item 46
5.2.5 Printing all items 46
5.2.6 Printing an item 46
5.2.7 Reprinting weighing ticket 46
5.2.8 Printing weighing data 46
5.2.9 Searching for items 47
5.2.10 Sorting items 47

5.2.11 Exiting Archive 47
5.3 Flynet Data List 47
5.3.1 Setpoint 47
5.3.2 Range 47
5.3.3 Progressive number 47
6 OPERATING MODES - OPERATION 48
6.1 Weighing operation with data recall (RcD) 48
6.2 Weighing operation with master file data recall RcA 49
6.3 Weighing operation with preset weight data recall 50
6.4 Weighing operation with preset weight 51
6.5 Notes on using the Tare with Entry Diade 52
6.5.1 Using the indicator: practical example 52
6.6 Traffic light operation 52
6.7 Card operation 53
6.8 Card operation with transponder reader "Nedap" 57
7 TOTALS 57
7.1 Product 58
7.2 Customer 58
7.3 Plate 59
7.4 Master file data 59
7.5 PRESET WEIGHTS 60
7.6 General Total 61
7.7 Partial Total 61
8 MANAGING CSV FILE 62
8.1 Importing data 62
8.2 Exporting data 62
8.2.1 Exporting selected archives 62
8.2.2 Copying 62
8.2.3 Deleting data 63
9 MANAGING DATA TRANSMISSION 64
9.1 NETWORK key: 64
9.2 SERIAL key: 65
9.3 MPP key: 67
9.4 INDICATOR PARAMETER key: 68
10 PRINTED DATA STRING 69

10.1 NETWORK key:..... 69
10.2 SERIAL key:..... 70
10.3 Delete data key:..... 70
10.4 General button: 71
10.5 Printed Data String Format of Flynet Indicator 71
11 NEDAP WEIGHING 75
11.1 Introduction..... 75
11.2 Configuration..... 75
11.3 Automatic weighing procedure with NEDAP..... 78
11.4 Manual Weighing Button 79
11.5 Error signals when weighing with NEDAP card 79
11.6 Special cyclic string "ExtendedMessage" 79
11.7 Notes for NEDAP management and assembly 80

2 INTRODUCTION

The DOUBLE WEIGHING operation is used to weigh vehicles, which are weighed before and after loading to determine the amount of goods transported.
The double weighing operation function can be managed with:

- ✔ input-output operations;
- ✔ operations with preset weights.

The input-output operations can be managed with:

- ✔ automatically assigned data recall (9 digits) for input-output operations (hereinafter abbreviated as RcD);
- ✔ plate type data recall (20 characters) for input-output operations with plate setting before each weighing operation (RcD plate);
- ✔ master file data type data recall (9 digits or 20 characters) for input-output operations with master file code setting before each weighing operation (RcA);
- ✔ without data recall codes for input-output operations with setting of the input weight before each output weighing operation.

The operations with preset weights can be managed with:

- ✔ data recall (9 digits) for preset weight operations (RcP);
- ✔ plate type data recall (20 characters) for preset weight operations (RcP plate).

For all other information, refer to the manual “Flynet50 Use, maintenance and installation manual”.

3 CONFIGURING THE INDICATOR

Below is the list of the typical parameters of the Entry Diade application.

To access the configuration, press the keys:



(Path: MENU - TOOLS - CONFIGURATION - APPLICATION)

Use the lower bar or the single key to select the desired parameter section.

The default values of the individual parameters are highlighted in bold.

3.1 ARCHIVES - CONFIGURING ARCHIVES



3.1.1 Parameters of the product archive



PRODUCT		
Parameter	*Value*	*Description*
Enable	**YES** NO	Enabling using the archive
Type of window	**Standard** With image	Type of archive display
Mandatory data	YES **NO**	Code selected for weighing operation
Selection	**NO** First weighing operation Second weighing operation Always	When code is to be selected
Immediate search	**YES**	Display window for data search

	NO	
Search Keyboard	**Alphanumeric** Numeric	Keyboard type enabled for search
Display defaults	Code Description **Code and description**	Type of archive display
Default sorting	**By Code** By Description	Data for archive sorting
Sorting type default	**Ascending** Descending	Type of archive sorting
Customised archive name		Enter a different text for Product. The new text set will be used throughout the application

3.1.2 Parameters of the customer archive



CUSTOMER		
Parameter	*Value*	*Description*
Enable	**YES** NO	Enabling using the archive
Type of window	**Standard** With image	Type of archive display
Mandatory data	YES **NO**	Code selected for weighing operation
Selection	**NO** First weighing operation Second weighing operation	When code is to be selected

	Always	
Immediate search	**YES** NO	Display window for data search
Search Keyboard	**Alphanumeric** Numeric	Keyboard type enabled for search
Display defaults	Code Description **Code and description**	Type of archive display
Default sorting	**By Code** By Description	Data for archive sorting
Sorting type default	**Ascending** Descending	Type of archive sorting
Customised archive name		Set a different text for customer. The new text set will be used throughout the application

3.1.3 Parameters for the plate archive



PLATE		
Parameter	*Value*	*Description*
Enable	**YES** NO	Enabling using the archive
Type of window	**Standard** With image	Type of archive display
Mandatory data	YES **NO**	Code selected for weighing operation
Selection	**NO** First weighing operation Second weighing operation Always	When code is to be selected
Immediate search	**YES** NO	Display window for data search
Search Keyboard	**Alphanumeric** Numeric	Keyboard type enabled for search
Display defaults	Code Description **Code and description**	Type of archive display
Default sorting	**By Code** By Description	Data for archive sorting
Sorting type default	**Ascending** Descending	Type of archive sorting
Customised archive name		Set a different text for Plate. The new text set will be used

		throughout the application

3.1.4 Configuring the automatically assigned data recall archive



DATA RECALL		
Parameter	*Value*	*Description*
Enabled	**YES** NO	Enabling using the archive
No. of prints for first weighing operation	**0**	Number of copies of printed input tickets apart from the main one
No. of prints for second weighing operation	**0**	Number of output printed tickets apart from the main one
Printing date time	**YES** NO	Enabling date and time printout
Logo printout	**YES** NO	Enabling logo printout
Manufacturer line printout	**YES** NO	Enabling CB manufacturer line printout
Printing first weighing operation barcode	**YES** NO	Enabling input barcode printout A CODE128 is printed with the fixed text cRcD and the code RcD
Printing second weighing operation barcode	**YES** NO	Enabling output barcode printout A CODE128 is printed with RcD code, separator character #, net weight
Alphanumeric Code	YES **NO**	Alphanumeric barcode
Plate Code	YES **NO**	Recall code for Plate

Main printer first weigh. oper. layout	**adrinput.xml**	Main printer input printout layout
Main printer sec. weighing operation layout	**adrinputOutput.xml**	Main printer output printout layout
Sec. printer first weighing operation layout	**adrinput.xml**	Secondary printer input printout layout
Sec. printer second weighing operation layout	**adrinputOutput.xml**	Secondary printer output printout layout
Printing enabled	**Always** Second weighing operation	Enabling printing ticket printout

3.1.5 Configuring master file data recall



MASTER FILE DATA RECALL		
Parameter	*Value*	*Description*
Enabled	**YES** NO	Enabling using the archive
No. of prints for first weighing operation	**0**	Number of copies of printed input tickets apart from the main one
No. of prints for second weighing operation	**0**	Number of output printed tickets apart from the main one
Printing date time	**YES** NO	Enabling date and time printout
Logo printout	**YES** NO	Enabling logo printout
Manufacturer line printout	**YES** NO	Enabling CB manufacturer line printout
Printing first weighing operation barcode	**YES** NO	Enabling input barcode printout. An EAN8 with a net weight is printed.

Printing second weighing operation barcode	**YES** NO	Enabling output barcode printout. A CODE128 with RcA code, separator character #, net weight is printed
Alphanumeric Code	YES **NO**	Alphanumeric type code
Main printer first weigh. operation layout	**rdrinput.xml**	Main printer input printout layout
Main printer sec. weighing operation layout	**rdrinputOutput.xml**	Main printer output printout layout
Sec. printer first weighing operation layout	**rdrinput.xml**	Secondary printer input printout layout
Sec. printer second weighing operation layout	**rdrinputOutput.xml**	Secondary printer output printout layout
Printing enabled	**Always** Second weighing operation	Enabling printing ticket printout

3.1.6 Configuring preset weight data recall



PRESET WEIGHT DATA RECALL		
Parameter	*Value*	*Description*
Enabled	**YES** NO	Enabling using the archive
Lock the weighing if the weight is less than the predetermined weight		Check to block the weighing with a weight lower than the predetermined weight
No. of prints	**0**	Number of printed tickets apart from the main one
Printing date time	**YES** NO	Enabling date and time printout
Logo printout	**YES**	Enabling logo printout

	NO	
Manufacturer line printout	**YES** NO	Enabling CB manufacturer line printout
Barcode printout	**YES** NO	Enabling first weighing operation barcode printout. EAN8 is printed with net weight
Main printer printout layout	**pdroutput.xml**	Main printer printout layout
Sec. printer printout layout	**pdroutput.xml**	Secondary printer printout layout

3.1.7 Configuring preset weight



PRESET WEIGHTS		
Parameter	*Value*	*Description*
Enabled	**YES** NO	Enabling using the archive
Lock the weighing if the weight is less than the predetermined weight		Check to block the weighing with a weight lower than the predetermined weight
No. of prints for first weighing operation	**0**	Number of copies of printed input tickets apart from the main one
No. of prints for second weighing operation	**0**	Number of output printed tickets apart from the main one
Printing date time	**YES** NO	Enabling date and time printout
Logo printout	**YES** NO	Enabling logo printout
Manufacturer line printout	**YES** NO	Enabling CB manufacturer line printout
Printing first weighing operation	**YES**	Enabling first weighing barcode printout. An EAN8 with net

barcode	NO	weight is printed
Printing second weighing operation barcode	**YES** NO	Enabling first weighing barcode printout. An EAN8 with net weight is printed
Main printer first weighing operation layout	**pwinput.xml**	Main printer first weighing operation printout layout
Main printer second weighing operation layout	**pwoutput.xml**	Main printer second weighing operation printout layout
Secondary printer first weighing operation layout	**pwinput.xml**	Secondary printer first weighing operation printout layout
Secondary printer second weighing operation layout	**pwoutput.xml**	Secondary printer second weighing operation printout layout

3.1.8 Coefficient



COEFFICIENT		
Parameter	*Value*	*Description*
Enabled	YES **NO**	Enabling using the archive
Customised archive name		Set a different text for Coefficient. The new text set will be used throughout the application
Customised result header		Set a different text for Result. The new text set will be used throughout the application

3.2 OTHER - OTHER CONFIGURATIONS



3.2.1 Fields



You can set up 7 messages, each one consisting of a description line and a value line, which can be set as a printout footer if necessary. For each message you can set when to print it (input, output always or never).

FIELDS		
Parameter	*Value*	*Description*
Enable	YES **NO**	Enabling using additional fields
Text maximum length	**30**	Settable value (max.80)
Value maximum length	**30**	Settable value (max.80)
Field 1	**Field1**	Click on the parameter Field 1 to access the table of individual values
Field 2	**Field2**	Click on the parameter Field 2 to access the table of individual values
Field 3	**Field3**	Click on the parameter Field 3 to access the table of individual values
Field 4	**Field4**	Click on the parameter Field 4 to access the table of individual values
Field 5	**Field5**	Click on the parameter Field 5 to access the table of individual values
Field 6	**Field6**	Click on the parameter Field 6 to access the table of individual values
Field 7	**Field7**	Click on the parameter Field 7 to access the table of individual

		values

Individual value parameters		
Parameter	*Value*	*Description*
Code	**1**	Field number from 1 to 7
Text	**Field1**	Field text value
Value		Field value
Print	Never **Always** First weighing operation Second weighing operation	When to print the field
Delete	**YES** NO	Enabling field deleting after printing
Always print the text	YES **NO**	Enabling field text printing

3.2.2 Configuring printer



All the sub-menus are present to correctly set the serial printer(s) to be connected.

3.2.2.1 Configuring serial port



Select the desired COM and set the required parameters. Only the serial ports that are correctly installed in the indicator when accessing the machine setup are displayed.

SERIAL PORTS / COM4		
Parameter	*Value*	*Description*
Baudrate		Select speed
Bits		Select data bit
Stop		Select stop bit
Parity		Select parity
Handshake		Select handshake (none, hardware)
Protocol		RS232

SERIAL PORTS / COM6		
Parameter	*Value*	*Description*
Baudrate		Select speed
Bits		Select data bit
Stop		Select stop bit
Parity		Select parity
Handshake		Select handshake (none, xon/xoff)
Protocol		RS232

SERIAL PORTS / COM7		
Parameter	*Value*	*Description*
Baudrate		Select speed
Bits		Select data bit
Stop		Select stop bit
Parity		Select parity
Handshake		Select handshake (none)
Protocol		RS422

3.2.2.2 *Configuring printer*



A printer instance needs to be added.

Click on Printers.

Press  Add key to add a printer.

Set the desired name for the printer instance and press the Confirm key.

A new instance with a different name must be created for each connected printer.

IMPORTANT: The name set for the instance must be selected in the Printer Alias parameter in the Printer Configuration menu.

Select the model and the connection COM and press the  Save key to save the configuration.

CONFIGURING PRINTER		
Parameter	*Value*	*Description*
Model	**STB80**	This contains the list of printers that can be connected. The key to open the specific parameters of the selected model are on the right of the model.
COM	**COM4**	Select the connection com

3.2.2.3 *Configuring parameters*



PRINTER		
Parameter	*Value*	*Description*
Weighing printer	**Main**	It enables the printer to be a primary or secondary printer too

	Both	
In case of failure of secondary printer failure	**Interrupt** Continue	How to act in case of secondary printer failure
Main Printer Alias		Select the name of the printer instance
Secondary Printer Alias		Select the name of the printer instance
No. of line feeds to skip input weighing operation	**15**	Number of lines feeds to position the outgoing printout on the tag.

3.2.2.4 Configuring layouts



Below you can select the layout to be used for each type of operation in the application. The same parameter is also present in the setup of the single operation. Changing it on one side will also change it on the other.

WARNING: check that the layout is correct for the model of the printer present.

LAYOUT		
Parameter	*Value*	*Description*
AUTOMATICALLY ASSIGNED DATA RECALL		
Data recall Main printer first weigh. operation layout	adrinput.xml	Select the incoming printout layout on the main printer
Data recall Main printer second weigh. operation layout	adrInputOutput.xml	Select the outgoing printout layout on the main printer
Data recall Sec. printer first weighing operation layout	adrinput.xml	Select the incoming printout layout on the secondary printer
Data recall Sec. printer second weigh. operation layout	adrInputOutput.xml	Select the outgoing printout layout on the secondary printer
PRESET WEIGHTS		
Preset weight Main printer first weigh operation layout	pwinput.xml	Select the incoming printout layout on the main printer

Preset weight Main printer sec. weighing operation layout	pwoutput.xml	Select the outgoing printout layout on the main printer
Preset weight Sec. printer first weighing operation layout	pwinput.xml	Select the incoming printout layout on the secondary printer
Preset weight Sec. printer sec. weighing operation layout	pwoutput.xml	Select the outgoing printout layout on the secondary printer
MASTER FILE DATA RECALL		
Master file data Main printer first weigh. operation layout	rdrinput.xml	Select the incoming printout layout on the main printer
Master file data Main printer sec. weighing operation layout	rdrinputOutput.xml	Select the outgoing printout layout on the main printer
Master file data Sec. printer first weighing operation layout	rdrinput.xml	Select the incoming printout layout on the secondary printer
Master file data Sec. printer second weighing operation layout	rdrinputOutput.xml	Select the outgoing printout layout on the secondary printer
PRESET WEIGHT DATA RECALL		
PRESET WEIGHTS Print layout on main printer	pdroutput.xml	Select the printing layout on the main printer
PRESET WEIGHTS Print layout on secondary printer	pdroutput.xml	Select the printing layout on secondary printer

3.2.2.5 Configuring header texts



You can set up 5 lines of messages, each one consisting of 38 characters which can be set as printout header if necessary.

TEXTS		
Parameter	*Value*	*Description*
Text 1		Alphanumeric text
Text 2		Alphanumeric text
Text 3		Alphanumeric text
Text 4		Alphanumeric text
Text 5		Alphanumeric text

Printing texts in totals	YES **NO**	Enabling text printing in total printout

3.2.2.6 Configuring footer texts



You can set up 5 lines of messages, each one consisting of 38 characters which can be set as printout footer if necessary.

TEXTS		
Parameter	*Value*	*Description*
Text 1		Alphanumeric text
Text 2		Alphanumeric text
Text 3		Alphanumeric text
Text 4		Alphanumeric text
Text 5		Alphanumeric text

3.2.3 Display

DISPLAY		
Parameter	*Value*	*Description*
Main page	Multiscale **Single scale**	
Scale switching on	A,B,S etc...	In case of duplex indicator, at switching on select the scale
Scale selection	**Yes** No	In case of duplex indicator, enable scale change

3.2.4 Configuring weighing operations



PRINTER		
Parameter	*Value*	*Description*
Checking the minimum net weight value		If it is set, this determines the minimum weight (net weighed) to enable a weighing operation
Managing new weighing operation with scale unloading	ON **OFF**	Enabling new weighing operation with scale unloading
Progressive number increase	Manual First weighing operation Second weighing operation **Always**	Modes for increasing the progressive number
Printing progressive number	Manual First weighing operation Second weighing operation **Always**	How to print the progressive number
Deleting if maximum weight is exceeded		If this is ticked, it cancels the weighing operation if the weight on the platform exceeds the maximum weight set (Rcp or RCA)
Deleting codes after weighing	**ON** OFF	Enabling the code deletion after weighing
Printing serial number	**No** First weighing operation Second weighing operation Always	Serial number printing position

3.2.5 Automatically exporting weighing operation archive in csv



Automatically exporting CSV			
Parameter	*Value*	*Description*	
Automatic export	YES **NO**	If this is ticked, the export of the weighing operation to a csv format file is enabled. The following are the 3 export modes, one excluding the other ones	
	Export every (weighing operation)	**1**	It is possible to set how many weighing operations to be exported every time
	Export every (hours)	**1**	It is possible to set how many hours have to elapse between one export operation and the next one
	Export at (time)	**hh:mm**	You can set the time at which the export is to be carried out
File export device	**\NAND_Flash\Extern**	Select a location to export to	
Deleting exported weighing operations	YES **NO**	It is possible to set whether or not to delete the weighing operations from the DB after exporting	
Dividing the csv file every (number of exports)	**1**	It is possible to create multiple csv files by setting the number of weighing operations per file. **(A)**	
Delete weighs older than (days)	**0**	Automatically delete the older of the weighted number of days.(**B)**	

(A)

The following examples for clarity are made with "weighted" exports but the same reasoning also applies to "time" exports.

Example 1)

"Export every (weighs) = 1"
"Divide the csv file every (nr. Exports) = 1"
Result: At each weighing a different .csv file is created with the format "yyyy_mm_dd_hh_mm_ss_Pesate.csv" (it may differ according to the language in use).

Example 2)

"Export every (weighs) = 1"
"Divide the csv file every (nr. Exports) = 0"
Result: At each weighing, the weighing in the queue is added to the "Pesate.csv" file (it may differ according to the language in use). Operation reinserted for compatibility with dated releases where only one file was used for exports.

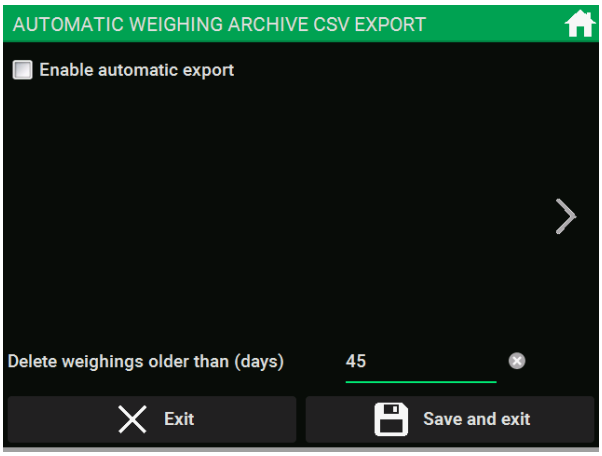
Example 3)

"Export every (weighs) = 1"
"Divide the csv file every (nr. Exports) = 100"
Result: At each weighing, the weighing in the queue is added to the "Pesate.csv" file (it may differ according to the language in use). On the 101st export (corresponding to the 101st weigh), a new "Pesate.csv" file is created with the 101 weight and the old one with the previous 100 weighs is renamed with the date and time of that instant.

Example 4)

"Export every (weighs) = 10"
"Divide the csv file every (nr. Exports) = 5"
Result: Every 10 weighs, 10 weighs are added in the queue to the "Pesate.csv" file. On the sixth export (corresponding to the 60th weigh), a new "Pesate.csv" file is created with the last 10 weighs and the old one with the previous 50 weighs is renamed with the date and time of that instant.
(B)

Elimination of obsolete weighings.
If a value other than 0 (zero) days is set, a search is made for the old and deleted weighs at the end of each weighing.
Deletion is unrelated to automatic archiving.



Automatic archiving with cancellation of old weighings.

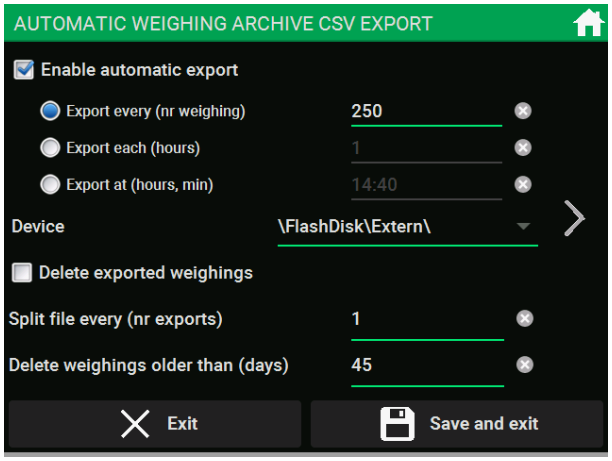
Example of operation with the parameters below.

If there are 1000 weighs in memory and 500 of them are older than 45 days, when I go to export 250 the obsolete 500 will be eliminated.

The 500 recent weighings will remain in memory.

When it comes to + 250 new weighs, the new 250 are exported and if there are weighs older than 45 days they will be eliminated.

If you activate "Clear exported weighs", after export the weighs archive will be completely emptied.



Emailing csv		
Parameter	*Value*	*Description*
Sending email	YES **NO**	Enabling/Disabling sending emails with csv files of the weighs
Mail to:		Recipient's email address

Mail Cc:		Email address of the Cc recipient
Mail blind cc:		Email address of the Bcc recipient
Subject		Subject of the email
Text		Email text
Sending csv to FTP Server		
Parameter	*Value*	*Description*
Sending to FTP server	YES **NO**	
Host folder		
Deleting the csv transmitted after number of days		
Configuring FTP client		
Parameter	*Value*	*Description*
Host		
UserName		
Password		
Port	**21**	

3.2.6 Package number



Package number		
Parameter	*Value*	*Description*
Applying Package No. to the Tare	YES **NO**	Enabling/disabling using packages associated with tare.
Applying Package No. to Tare 1	YES **NO**	Enabling/disabling using packages associated with tare1.

WARNING: if known tares are enabled, the packages associated with tare2 are always available

3.2.7 Excluding columns



By default, all listed data are exported to the CSV file. Selecting them one by one, it is possible to exclude the unwanted ones, reducing the number of columns that will be present in the CSV file.

3.3 INPUTS - Configuring inputs



3.3.1 Configuring weighing enabling input



Enabling of weighing upon activation of the input.
Example: if connected to photocells it can be used to check the correct positioning of the vehicle on the scale.

Enabling weighing operation		
Parameter	*Value*	*Description*
ID		Instance number
Input number		Line number (E.g. 101)
Scale Alias		Name of the reference scale (example A)

3.3.2 Configuring weight reset input



Zeroing of the weight upon activation of the input, simulates pressing the zeroing button on the terminal display.

Resetting weight		
Parameter	*Value*	*Description*
ID		Instance number
Input number		Line number (E.g. 101)
Scale Alias		Name of the reference scale (example A)

3.3.3 Configuring weighing operation input



Execution of the weighing upon activation of the input, simulates the pressure of the print key on the terminal display.

Weighing operation		
Parameter	*Value*	*Description*
Input number		Line number (E.g. 101)

3.3.4 Configuring transmission request input



Upon activation of the input, the terminal sends a string of the selected format.

Transmission request		
Parameter	*Value*	*Description*
Input number		Line number (E.g. 101)

3.3.5 Configuring scale selection input



Selection of the scale configured for that given input.

Scale selection		
Parameter	*Value*	*Description*
ID		Instance number
Input number		Line number (E.g. 101)
Scale Alias		Name of the reference scale (example A)

3.4 OUTPUTS - Output configuration



3.4.1 Traffic light configuration



Configuration for red and green traffic lights for handling.

Traffic light		
Parameter	*Value*	*Description*
ID		Traffic light instance number
Scale Alias		Name of the reference scale (example A)
Green light output number		Output number
Red light output number		Output number
Activation time		Time in seconds of contact duration
Weight variation		Weight value to switch off the traffic light
Green light input number		Input number to enable green light

3.4.1.1 Remote Traffic light configuration



It is possible to use a wired traffic light on another (remote) terminal, of which it is essential to know the IP address, port, green light output and red light output. On the terminal that does not have the wiring with the traffic light, it is necessary to set:

Semaforo		
Parameter	*Value*	*Description*
ID		Traffic light instance number
Green light output number		Number of the output to which the green light on the terminal is connected.

Red light output number		Number of the output to which the red light on the terminal is connected.
Scale Alias		Name of the reference scale (example A)
Activation time (s)		Time in seconds of contact duration
Green light input number		Input number to enable green light (optional)
Weight variation		Weight value to switch off the traffic light
Remote Traffic Light		Check to enable the remote traffic light
Remote viewer		Check to enable the sending of a remote command for the management of the traffic light states on the display.
Traffic Light IP		Set the IP address of the remote terminal that has the wiring to the traffic light
Traffic Light Port		Set the port of the remote terminal where transmission to remote commands has been enabled. Example 6006.
Green light output number		Number of the output to which the green light on the remote terminal is connected.
Red light output number		Number of the output to which the red light on the remote terminal is connected.
Green light input number		Input number to enable green light on the remote terminal (optional)

In order to manage a remote traffic light it is necessary, on the terminal that has the wiring, to create a network transmission with remote commands.
Example

TRASMISSION>RETE>TX_LAN_CMD_TL_01	
Scale	Name of the reference scale (example A)
Port	TCP port where to accept the call.
Transmission interval (ms)	Time in seconds of contact duration
String	ExtendedString
Protocol	Remote commands
……..	……

P.S. It is necessary to leave the contacts managed remotely unused. Otherwise, behaviors will be mixed between the two assigned logics.

3.4.2 Output configuration Weighing operation completed



Activation of the output at the end of a weighing

Weighing operation completed		
Parameter	*Value*	*Description*
Output number		Line number (E.g. 101)
Activation time (sec)		Output duration time

3.4.3 Output configuration Transmission Ok



Activation of the output upon receipt of the ACK character.

Successful transmission		
Parameter	*Value*	*Description*
Output number		Line number (E.g. 101)
Activation time (sec)		Output duration time

3.4.4 Output Configuration Selected Scale



Activation of the output when the set scale is selected.

Selected Scale		
Parameter	*Value*	*Description*
ID		Instance number
Output number		Line number (E.g. 101)
Scale Alias		Name of the reference scale (example A)

3.4.5 Configuring Indicator Ready output



Always active output once the terminal has completed booting.

Indicator ready		
Parameter	*Value*	*Description*
ID		Instance number
Output number		Line number (E.g. 101)

3.4.6 Configuring Bilanciai active output



Activation of the output when you are on the work page and the scale is valid, without errors and with a valid weight.

Bilanciai active		
Parameter	*Value*	*Description*
ID		Instance number
Output number		Line number (E.g. 101)

3.4.7 Configuring card accepted output



Activation of the output after reading a badge that matches the archive data.

Card accepted		
Parameter	*Value*	*Description*
Output number		Line number (E.g. 101)
Activation time (sec)	**1**	Output duration time

3.4.8 Configuring card rejected output



Activation of the output after reading a badge that has no correspondence with the archive data.

Card rejected		
Parameter	*Value*	*Description*
Output number		Line number (E.g. 101)
Activation time (sec)	**1**	Output duration time

3.4.9 Mpp output Configuration execute



Activation of the output after the execution of the MPP operation.

Mpp Execute		
Parameter	*Value*	*Description*
Output number		Line number (E.g. 101)
Activation time (sec)	**1**	Output duration time

4 BASIC OPERATIONS

4.1 Using the touch screen

The touch screen will allow easily selecting items or giving commands for operation. Touch the screen once to select an item or launch an application.

ATTENTION

To avoid damaging the touch screen, never use pointed objects on it

4.2 Icons

The icons displayed at the top of the touch screen provide information about the status of the device.



Network connection is active



Network connection is not active

3:38 Current time

4.3 Keys

Keys displayed at the bottom of the touch screen allow access to the device tools



Select main page.



Select the page allowing you to recall the accessory data, data pre-set in the archive, data used during the weighing operations (products, customer, plate and data recall).



Select page Shortcut keys



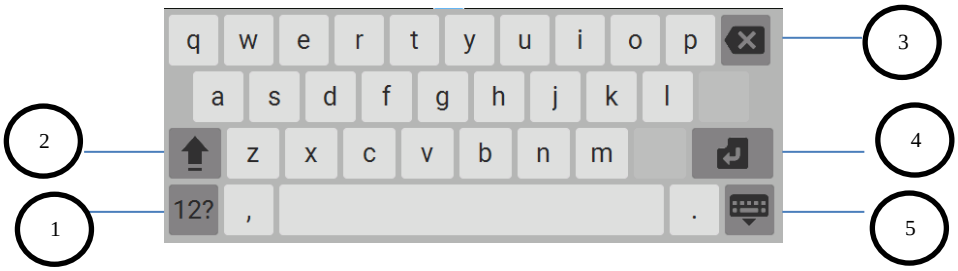
Select MPP page



Select data page; this page and the following one allow populating archives or setting data (progressive number, setpoint, range etc.) .

4.4 Configuring a text

You can enter a text using the characters on the virtual keyboard. Touch a key and hold it down to select the character displayed on the upper side of the key.



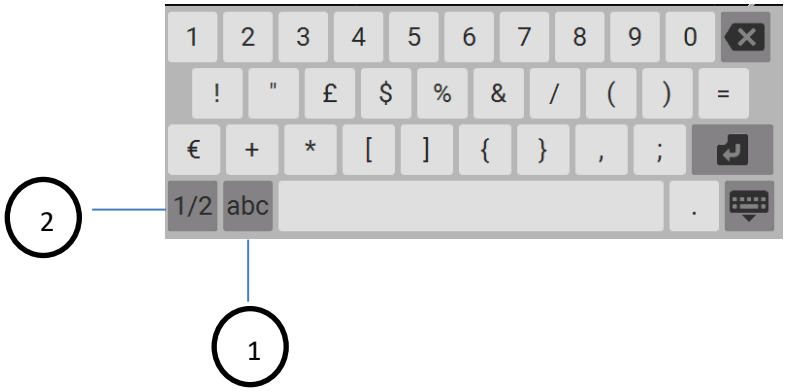
1 Use this key to switch from Alphanumeric mode to Number/Symbol mode.

2 Use this key for Uppercase/Lowercase selection.

3 This key deletes an entered character.

4 This key confirms the text and closes the virtual keyboard.

5 This key cancels a setting, retrieving the initial text and closing the virtual keyboard.



1 Use this key to switch from Number/Symbol mode to Alphanumeric mode.

2 This displays several symbols.

4.5 Access levels

Each operation is associated to an access level. If access level management is enabled, set the requested access level before performing an operation. During configuration of the device, you can set a password for each of the levels.

If level management is enabled, the level 4 password must be set.

The other levels are optional and will be selectable only if the respective password is set.

To enable password management, press in sequence:  ,  ,  , 

Access level setting		
Parameter	*Value*	*Description*
Access levels	**OFF** ON	NO disables access levels, by default they are not enabled.SI abilita la gestione accessi
Start-up access level	**1**	Set a level, default is 1
Level 2 password	**[Not configured]**	Set a password if you want to enter level 2
Level 3 password	**[Not configured]**	Set a password if you want to enter level 3
Level 4 password	**[Not configured]**	Set a password if you want to enter level 4. This password is required if the access level is set to "ON".

To select and change the access levels, press in sequence:  ,  ,  or  and  (if previously set  in shortcut keys).

4.5.1 Scale

Operation	Level
Weighing operation	1
Resetting weight	1
Acquiring\Deleting tare	1

4.5.2 Archives

Operation	Level
Selecting items for weighing operations	1
Sorting	1
Searching	1
New item	2

Deleting	3
Modification	3

4.5.3 CSV

Operation	Level
Exporting	1
Importing	3

4.5.4 Tools

Operation	Level
Activating utilities	1
Selecting colour	1
Setting up shortcut keys	1
Stand-by	1
Error management	1
Setting date and time	4
Device configuration	4

5 ARCHIVES - DATA



(Path: MENU/ARCHIVES)

The device provides tables, where to save information to be used during the weighing operations and ancillary data.

5.1 Flynet Archive List

The Flynet application handles the following archives.

5.1.1 Product

dbo.Product	KEY	FIELD NAME	Abbreviated type	NULL values accepted	Notes
	*	Code	nvarchar(20)	No	Code value
		Description	nvarchar(40)	Yes	Associated description
		Image	nvarchar(50)	Yes	It is a text field that contains the path of the image that is inside the extern. It can only be used through the terminal and cannot be set from the outside.
		CoefCode	int	Yes	Coefficient

5.1.2 Customer

dbo.Customer	KEY	FIELD NAME	Abbreviated type	NULL values accepted	Notes
	*	Code	nvarchar(20)	No	Code value
		Description	nvarchar(40)	Yes	Associated description
		Image	nvarchar(50)	Yes	It is a text field that contains the path of the image that is inside the extern. It can only be used through the terminal and cannot be set from the outside.

5.1.3 Plate

dbo.Plate	KEY	FIELD NAME	Abbreviated type	NULL values accepted	Notes
	*	Code	nvarchar(20)	No	Code value
		Description	nvarchar(40)	Yes	Associated description
		Image	nvarchar(50)	Yes	It is a text field that contains the path of the image that is inside the extern. It can only be used through the terminal and cannot be set from the outside.

5.1.4 Weighing operations

dbo.Weighing	KEY	FIELD NAME	Abbreviated type	NULL values accepted	Notes
	*	Id	int	No	Increased value at each operation
		SerialNumberIN	nvarchar(40)	Yes	Input indicator serial number
		SerialNumberOUT	nvarchar(40)	Yes	Output indicator serial number
		OperationType	int	No	Type of operation
		RecallCode	nvarchar(20)	Yes	Operation Recall code
		FirstData	nvarchar(20)	Yes	First weighing operation date
		FirstTime	nvarchar(20)	Yes	First weighing operation time
		SecondData	nvarchar(20)	Yes	Second weighing operation date
		SecondTime	nvarchar(20)	Yes	Second weighing operation time
		FirstProgressive	int	Yes	First weighing operation progressive number
		SecondProgressive	int	Yes	Second weighing operation progressive number
		ProductCode	nvarchar(20)	Yes	Product Code
		ProductDescription	nvarchar(40)	Yes	Description associated with the product code
		CustomerCode	nvarchar(20)	Yes	Customer Code
		CustomerDescription	nvarchar(80)	Yes	Description associated with the customer code
		PlateCode	nvarchar(20)	Yes	Plate
		PlateDescription	nvarchar(40)	Yes	Description associated with the plate
		Field1	nvarchar(30)	Yes	Additional field
		Field2	nvarchar(30)	Yes	Additional field
		Field3	nvarchar(30)	Yes	Additional field
		Field4	nvarchar(30)	Yes	Additional field
		Field5	nvarchar(30)	Yes	Additional field
		Field6	nvarchar(30)	Yes	Additional field
		Field7	nvarchar(30)	Yes	Additional field
		Result	nvarchar(20)	Yes	Result matched to coefficient

	First Mpp	int	Yes	First weighing MMP code
	Second Mpp	int	Yes	Second weighing operation MPP code
	First Axle	int	YES	Input axes Id
	Second Axle	int	Yes	Input axes Id
	FirstScale	nvarchar(1)	Yes	Input operation scale
	SecondScale	nvarchar(1)	Yes	Output operation scale
	FirstWeight	nvarchar(12)	No	Input weighing operation
	FirstWeightA	nvarchar(12)	Yes	Input weighing operation with multiscale
	FirstWeightB	nvarchar(12)	Yes	Input weighing operation with multiscale
	FirstWeightC	nvarchar(12)		Input weighing operation with multiscale
	FirstWeightD	nvarchar(12)		Input weighing operation with multiscale
	SecondWeight	nvarchar(12)	Yes	Output weighing operation
	SecondWeightA	nvarchar(12)	Yes	Output weighing operation with multiscale
	SecondWeightB	nvarchar(12)	Yes	Output weighing operation with multiscale
	SecondWeightC	nvarchar(12)		Output weighing operation with multiscale
	SecondWeightD	nvarchar(12)		Output weighing operation with multiscale
	NetWeight	nvarchar(12)	Sì	Weighing net
	Status	nvarchar(20)	Si	Status

5.1.5 Data recall

dbo.ADR	KEY	FIELD NAME	Abbreviated type	NULL values accepted	Notes
	*	RecallCode	nvarchar(20)	No	Code value
		FirstWeight	nvarchar(12)	No	Input weighing operation
		First Data Weigh	nvarchar(20)	Yes	First weighing operation date
		first Time Weigh	nvarchar(20)	Yes	First weighing operation Time
		FirstProgressive	int	Yes	First weighing operation progressive number
		CustomerCode	nvarchar(20)	Yes	Associated customer code
		PlateCode	nvarchar(20)	Yes	Associated plate
		ProductCode	nvarchar(20)	Yes	Associated product code

5.1.6 Master file data

dbo.RDR	KEY	FIELD NAME	Abbreviated type	NULL values accepted	Notes
	*	Code	nvarchar(20)	No	Code value
		Description	nvarchar(40)	Yes	Associated description
		Product	nvarchar(20)	Yes	Associated product code
		Customer	nvarchar(20)	Yes	Associated customer code
		Plate	nvarchar(20)	Yes	Associated plate
		MaxWeight	nvarchar(12)	Yes	Maximum allowed weight to enable weighing
		WeighingDate	datetime	Yes	Date allowed for weighing operation
		First Data Weigh	nvarchar(20)	Si	First weighing operation date
		first Time Weigh	nvarchar(20)	Si	First weighing operation Time
		FirstWeight	nvarchar(12)	Si	Input weighing operation

5.1.7 PRESET WEIGHTS

dbo.PDR	KEY	FIELD NAME	Abbreviated type	NULL values accepted	Notes
	*	Code	nvarchar(20)	No	Code value
		Preset weight	nvarchar(12)	No	Preset weight
		Plate	nvarchar(20)	Yes	Associated plate
		Product	nvarchar(20)	Yes	Associated product code
		Customer	nvarchar(20)	Yes	Associated customer code
		MaxWeight	nvarchar(12)	Yes	Maximum allowed weight to enable weighing
		WeighingDate	datetime	Yes	Date allowed for weighing operation
		CoeffCode	int	Yes	Coefficient

5.1.8 Coefficient

dbo.Coeff	KEY	FIELD NAME	Abbreviated type	NULL values accepted	Notes
	*	Code	int	No	Code value
		Value	float	Yes	Coefficient value
		Operation	nvarchar(20)	No	Type of operation (multiplication or division)
		Round	float	Yes	rounding

5.1.9 Axles

dbo.AxlesArchive	KEY	FIELD NAME	Abbreviated type	NULL values accepted	Notes
	*	Id	int	No	
		Axle1	nvarchar(12)	Yes	Axle value
		Axle2	nvarchar(12)	Yes	Axle value
		Axle3	nvarchar(12)	Yes	Axle value
		Axle4	nvarchar(12)	Yes	Axle value
		Axle5	nvarchar(12)	Yes	Axle value
		Axle6	nvarchar(12)	Yes	Axle value
		Axle7	nvarchar(12)	Yes	Axle value
		Axle8	nvarchar(12)	Yes	Axle value
		Axle9	nvarchar(12)	Yes	Axle value
		Axle10	nvarchar(12)	Yes	Axle value
		OverloadAxle1	bit	Yes	Axle overload indication
		OverloadAxle2	bit	Yes	Axle overload indication
		OverloadAxle3	bit	Yes	Axle overload indication
		OverloadAxle4	bit	Yes	Axle overload indication
		OverloadAxle5	bit	Yes	Axle overload indication
		OverloadAxle6	bit	Yes	Axle overload indication
		OverloadAxle7	bit	Yes	Axle overload indication
		OverloadAxle8	bit	Yes	Axle overload indication
		OverloadAxle9	bit	Yes	Axle overload indication
		OverloadAxle10	bit	Yes	Axle overload indication
		SpeedAxle1	nvarchar(15)	Yes	Axle speed
		SpeedAxle2	nvarchar(15)	Yes	Axle speed
		SpeedAxle3	nvarchar(15)	Yes	Axle speed
		SpeedAxle4	nvarchar(15)	Yes	Axle speed
		SpeedAxle5	nvarchar(15)	Yes	Axle speed
		SpeedAxle6	nvarchar(15)	Yes	Axle speed
		SpeedAxle7	nvarchar(15)	Yes	Axle speed
		SpeedAxle8	nvarchar(15)	Yes	Axle speed
		SpeedAxle9	nvarchar(15)	Yes	Axle speed
		SpeedAxle10	nvarchar(15)	Yes	Axle speed
		CondAxle1	nvarchar(5)	Yes	Axle acquisition condition
		CondAxle2	nvarchar(5)	Yes	Axle acquisition condition
		CondAxle3	nvarchar(5)	Yes	Axle acquisition condition
		CondAxle4	nvarchar(5)	Yes	Axle acquisition condition
		CondAxle5	nvarchar(5)	Yes	Axle acquisition condition
		CondAxle6	nvarchar(5)	Yes	Axle acquisition condition
		CondAxle7	nvarchar(5)	Yes	Axle acquisition condition
		CondAxle8	nvarchar(5)	Yes	Axle acquisition condition
		CondAxle9	nvarchar(5)	Yes	Axle acquisition condition
		CondAxle10	nvarchar(5)	Yes	Axle acquisition condition
		Direction	nvarchar(10)	Yes	Direction of vehicle

5.1.10 Encoding cards

dbo.CardEncoding	KEY	FIELD NAME	Abbreviated type	NULL values accepted	Notes
	*	CardCode	nvarchar(100)	No	Original card code
		UserCode	nvarchar(100)	Yes	New code to be encoded in the archive

5.1.11 Tare

dbo.Tare	KEY	FIELD NAME	Abbreviated type	NULL values accepted	Notes
	*	Code	int	No	Tare code
		Description	nvarchar(30)	Yes	Tare description
		Value	nvarchar(20)	Yes	Tare value

5.2 Managing Archives

The actions that can be taken are described below.

5.2.1 Creating a new item

1. Press 
2. Set information.
3. Press  to save data in the database and exit or

   Press  to save data in the database and stay in set mode or

   Press  to exit.

5.2.2 Modifying an existing item

1. Touch the item to modify.
2. Press 
3. Set information.
4. Press  to save data in the database or

Press  to exit.

5.2.3 Deleting all items

1. Press 
2. Select **YES** option.

5.2.4 Deleting an item

1. Touch the item to delete.
2. Press 

5.2.5 Printing all items

1. Press 

5.2.6 Printing an item

1. Touch the item to print.
2. Press 

5.2.7 Reprinting weighing ticket

From the weighing archive, by pressing this key it is possible to reprint the ticket relative to the selected weighing.

1. Touch the item to print.
2. Press 
3. Select "Reprint ticket"

5.2.8 Printing weighing data

From the weighing archive, by pressing this key it is possible to open the list of data present during the selected weighing operation.

4. Touch the item to print.
5. Press 
6. Select "Print data"

5.2.9 Searching for items

1. Press 
2. Press 
3. Select the option associated to your search.
4. Enter the item you are looking for.
5. Press 

5.2.10 Sorting items

1. Press 
2. Select the option associated to the sorting operation you are performing.
3. Select the option associated to the type of sorting operation.
4. Press 

5.2.11 Exiting Archive

1. Press  to exit the archive and return to the previous page.

5.3 Flynet Data List

The Flynet application handles the data shown below.

5.3.1 Setpoint

The setpoint is a weight value to be reached to which an output contact is associated. When the scale reaches the set value the contact is provided and kept. When the weight returns below the set value the contact is deactivated.

5.3.2 Range

The range includes a set of weights to be reached to which an output contact is associated. When the scale reaches a value within the set range the contact is provided and kept. When the weight value goes below or above the set range, the contact is deactivated.

5.3.3 Progressive number

The progressive number is a counter that is incremented with each weighing operation completed correctly. By setting up the indicator it is possible to modify the increasing modes (See paragraph 3.2.5 Configuring weighing operation) and the printout modes on the ticket.

6 OPERATING MODES - OPERATION

Entry Diade or “double-weighing” operation is generally performed on vehicles, which are weighed before they are loaded and after loading in order to establish the quantity of goods transported.

The first and second weighing operation must not be necessarily consecutive.

The device displays the status of the operation in progress by changing the colour of the key used to control the operation. Before requesting it the key colour is the same as the selected theme, while with the operation triggered it becomes Grey.

Input-output operation requires 2 weighing operations:

- input operation during which the weight of the vehicle is acquired as a first weight and associated with the accessory data (product code, customer code, plate and coefficient) to a recognition code;
- output operation during which, the first weight and the accessory data are recalled using the recognition code and the weight of the vehicle is acquired as a second weight and the difference is calculated (net weight).

The recognition code used during the input-output operation can be a data recall type of code:

9-digit Rcd or plate/alphanumeric type (20 characters)

RCA, Master file recall, 9 digits or **20** character alphanumeric.

This RCA/RCD codes distinguish two different ways of performing the input operations.

6.1 Weighing operation with data recall (RcD)



The input/output operation with data recall is enabled during installation. The input and output operation phases do not have to be consecutive, and the difference between the two input and output weighting operations can be calculated on the second. With every incoming print, the indicator attributes and prints a code (Rcd code) which, if it is set before the second weighing operation, recalls the initial data from the first weighing operation (weight, product code, customer code, vehicle license plate number, coefficient, date, hour and progressive number).

To obtain a printout of an input weighing or first weighing operation, proceed as follows:

- set the required accessory data: product code, customer code, vehicle license plate number, and coefficient (if you wish to manage these data);
- verify that the printer is connected, switched on and with the printing module available;

- press the key  (”**First Weighing operation**”) to get the first weighing operation printout.
- The device will create a new data recalling code and will print a ticket bearing all weighing information (if a printer has been set up accordingly).
- The device memorises weighing data in the database.

To obtain a printout of an outgoing weighing, or second weighing operation, proceed as follows:

- Select the data recalling code .
- The device will upload information saved during the first weighing operation.
- Press  (“**Second Weighing operation**”)
- The device prints a ticket bearing all weighing data (if printer is configured).
- The device memorises weighing data in the database.

Also remember that once the RcD code has been recalled, the product code, the customer code and the plate number can also be modified using the specially provided keys. These changes are only shown in the printout of the second weighing operation and do not modify the data associated with the first weighing operation.

The data of the first weighing operation are saved until the second weighing operation is printed and then they are deleted together with the data recall code.

Printing in both directions only takes place if:

- the weight is stabilised within 10 seconds;
- the weight is not negative or it does not exceed the maximum capacity.

The RCD code can also be enabled as an alphanumeric (20 characters) or plate (20 characters) type. If it is of this type, the operator is asked to set the code at the weighing request (input or output).

6.2 Weighing operation with master file data recall RcA



The input/output operation with master file recall is enabled during installation. The input and output operation phases do not have to be consecutive, and the difference between the two input and output weighting operations can be calculated on the second.

Weighing with RcA requires that the RcA archive has been filled in with the desired data.

With every incoming print, the indicator prints a Rcd code which, if it is set before the second weighing operation, recalls the initial data from the first weighing operation (weight, product code, customer code, vehicle license plate number, coefficient, date, hour and progressive number).

The RCA code is of 9 digits if numeric or of 20 characters if alphanumeric.

To obtain a printout of an input weighing or first weighing operation, proceed as follows:

- select the RcA code 
- set the required accessory data if they are not already associated with the RcA code: product code, customer code, vehicle license plate number, and coefficient (if you wish to manage these data)
- verify that the printer is connected, switched on and with the printing module available;
- press the key  (”**First Weighing operation**”) to get the first weighing operation printout.
- The device prints a ticket bearing all weighing data (if printer is configured).
- The device memorises weighing data in the database.

To obtain a printout of an outgoing weighing, or second weighing operation, proceed as follows:

- Select the master file data recalling code (RcA).
- The device will upload information saved during the first weighing operation.
- Press the key  (“**Second Weighing operation**”)
- The device prints a ticket bearing all weighing data (if printer is configured).
- The device memorises weighing data in the database.

Also remember that once the RcA code has been recalled, the product code, the customer code and the plate number can also be modified using the specially provided keys. These changes are only shown in the printout of the second weighing operation and do not modify the data associated with the first weighing operation and the same RcA code.

At the end of the output operation, the RcA code and any associated accessory data are saved, but it will be possible to perform a new input operation.

Printing in both directions only takes place if:

- the weight is stabilised within 10 seconds;
- the weight is not negative or it does not exceed the maximum capacity.

6.3 Weighing operation with preset weight data recall



Operation with preset weights is used when the first weight (or tare) of a vehicle is known and therefore does not require a weighing operation for it to be determined. The preset weights are associated to a code that allows for recall. In addition to the preset weight, accessory data can be

associated to each code, such as the product code, customer code, plate number, and coefficient. Remember that these data can also be entered later on the printing module using the specially provided menus; in this case, however, they are not saved with the code and are only valid for the current operation.
The recognition code used is of 9 digits if numeric or of 20 characters if alphanumeric or plate.

To obtain a printout with preset weights, proceed as follows:

- Select a RcP code.
- The device will upload the first weight and any optional information allocated to the selected recall code. You can modify data by setting up the required information or by selecting data from the tables.
- Press the key  (“**Second Weighing operation**”)
- The device prints a ticket bearing all weighing data (if printer is configured).
- The device memorises weighing data in the database.

Printing in both directions only takes place if:

- the weight is stabilised within 10 seconds;
- the weight is not negative or it does not exceed the maximum capacity.
- The weight on the platform is not less than the weight defined as "first weight" (if the parameter: "Block weigh if the weight is less than the predetermined weight" has been verified during the configuration phase)•

6.4 Weighing operation with preset weight



The operation that enables the manual entry of the first weight can be selected during installation. Related data, including the first weight, must be manually re-entered at the time of the second weighing operation.

To obtain a printout of a weighing with preset weight, proceed as follows:

- Set the first weight manually.
- Set or select any optional information.
- Press the key  ("**Second Weighing operation**")
- The device prints a ticket bearing all weighing data (if printer is configured).
- The device memorises weighing data in the database.

The device only prints if:

- the weight is stabilised within 10 seconds;
- the weight is not negative or it does not exceed the maximum capacity.
- The weight on the platform is not less than the weight defined as "first weight" (if the parameter: "Block weigh if the weight is less than the predetermined weight" has been verified during the configuration phase)

6.5 Notes on using the Tare with Entry Diade

The tare management in the Entry Diade operation is only visually available, namely it has only been made available to facilitate the operator in following the vehicle loading or unloading on and from the weighing system. When a weighing operation is requested, the indicator automatically deletes any tare from the selected weighing system, before proceeding with the actual weighing operation.

6.5.1 Using the indicator: practical example

- The vehicle enters the weighing system.
- The operator sets the necessary data and performs the input weighing operation.
- The operator presses the tare acquisition  key so that the weight of the vehicle is acquired as the tare and the indicator displays a net weight equal to 0 (zero).
- The operator loads the desired quantity of product onto the vehicle and looks at the net value indicated on the indicator display.
- The operator sets the necessary data and carries out the output weighing operation: the indicator automatically cancels the tare and carries out the weighing operation.
- The vehicle can exit the weighing system.

6.6 Traffic light operation

It is possible to enable the use of a traffic light associated with the weighing operation. The traffic light logic involves using two output contacts that will be used to manage a green light and a red light. From setup it is possible to set the output lines to be used and the on/off logic. The traffic light logic is to manage the vehicle weighing operation and its unloading after weighing.

Assuming you connect a green light and a red light to the traffic light and use the default values, when the scale is unloaded the two contacts are disabled so the two lights are off. The truck goes onto the platform and the red light is supplied. The operator starts the weighing operation and once it is finished the red light is deactivated and the green light turns on. The vehicle gets off the weighing system and the green light is deactivated.

If the “Traffic light timeout” parameter is set, the “Red” and “Green” outputs are supplied as explained above but removed, once the time set in the “Traffic light timeout” parameter has elapsed.

If the "Weight variation" parameter, other than zero, is set after the weighing operation is carried out, the green light is on until the weight present on the scale varies with respect to the acquired

weight by a quantity lower / higher than the weight variation set. As soon as the weight on the scale differs from the acquired weight by an amount at least equal to the weight variation set, the green light turns off and the red one turns on.

For example, if the weight acquired is 5000 kg and the weight variation set is 250 kg, when the weight present on the scale reaches 4750 kg because the vehicle is descending from the weighbridge (or it reaches 5250 kg because a second vehicle is climbing on the scale), the green light turns off and the red light turns on.

Note
The traffic light can be connected to another terminal, in this case a “remote traffic light” must be set, see paragraph 3.4.1.1.

6.7 Card operation

The cards can be used to recall the RCA/RCP weighing codes or to carry out automatically assigned RCD operations (only with Alphanumeric RCD or Plate RCD).
Any code read is first searched among the RCA and RCP tables, then if it is not present and "Creating input weighing operation with card" is enabled, this is used to make an automatically assigned weighing operation.

The managed cards can be barcode or transponder type.

To enable a barcode/transponder card you must set:

1) A serial port: 
(Path: MENU - TOOLS - CONFIGURATION - SYSTEM - SERIAL PORTS - COMX)

   Once the serial port has been chosen, set: Baud rate, stop bit, parity, Handshake (none) and protocol of the reader to be connected (different protocols, depending on the reader).

2) A reader: 
(Path: MENU - TOOLS - CONFIGURATION - SYSTEM - SERIAL PORTS - PRINTERS/READERS/IO)

   Select "READERS"/"ADD"/IDENTIFY READER WITH A NAME (e.g. reader1)/SELECT THE TYPE OF READER (e.g. Generic Reader) and associate it with the COMX previously set.

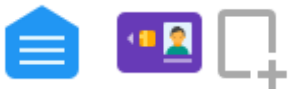
3) A Card: 
(Path: MENU - TOOLS - CONFIGURATION - CARD)

The following needs to be set for the card:

Cards		
Parameter	**Value**	***Description***
Type of card	Cb Neutral Tax code (16 characters) Encoded tax code (32 characters)	Select the type of card. • "Cb", special Bilanciai card: this card has a 13-digit frame in the same format as an EAN13 INDICOD. • "Neutral", allows you to read all the digits of the barcode/Transponder • "Tax code", handles frames longer than 16 characters. • "Encoded tax code", handles frames longer than 32 characters.
Link	Standard Product Customer Plate	This indicates where to search for the read data. "Standard": data are searched in the RCA/RCP/RCD files. "Products"/"Customer" and "License plate" data are searched in the corresponding files.
Automatic weighing operation		If this is ticked, it allows starting a weighing operation, after reading a barcode or transponder; it simulates pressing the print button.
Time-out (sec)		Minimum time length between one card reading and the next.
Time interval		Tick if a part of the read code is required. This works with cards of the following types: "Neutral"/"tax".
Length		If "Neutral"/"tax" card types are enabled, it is possible to set how many digits are to be used among the read ones.
From position		If "Neutral"/"tax" card types are enabled, it is possible to set from which position the code should be analysed, starting from "0". This is useful if the code to be used is placed between other data.
Initial control code		Set the barcode initial digit, which is usually used with "cb" type cards.
Creating input weighing operation with card		If this is ticked, it allows performing automatically assigned weighing operations. **This is used only in case**

		the following types are enabled: Alphanumeric RCD or plate RCD.

A barcode card or transponder can be re-encoded.

To re-encode, choose "Card encoding": 
(Path: MENU/CARD CODING/NEW)

- Move the barcode or transponder card close to the reader.
- The display shows the read code next to the icon (example: if Transponder: “E0070000242DC945” or in case of CB card: “8001508001501”). If it is already present, the associated code is recalled (example "150") while if it is new, the transcoding code must be set (example "150").
- End with:  (to save and exit) or  (to save and prepare for a new reading/encoding).

Barcodes or transponders can also be changed or set manually, if known, without being read by a reader.
Once barcode/transponder code has been matched with transcoding code, the archive whose code is to be recalled must be populated.

Example: if the archive has a numeric key (RCA/RCP), it will be necessary to set it in the same archive as a new code (max. 9 digits) with any associated data (product, customer, etc.).

Example: if the archive has an alphanumeric/plate key (alphanumeric RCA, alphanumeric/plate RCP), it will be necessary to set it in the same archive as a new code (max. 20 characters) with any associated data (product, customer, etc.).

When the reader connected to the FLYNET indicator detects the barcode/Transponder card it will recall the associated data and, if enabled, it will activate the weighing operation.

If the barcode/transponder is used without transcoding, it must be set inside the archive (of the set type) in its complete form.

If a code with or without transcoding is used, such as Alphanumeric RCD or plate RCD, it must NOT be set in any archive. When it is read, if it is not present within the archives (RCA/RCP) and if "Creating input weighing operation with card" is enabled, it is used to perform an alphanumeric or plate RCD type input/output weighing operation.

ATTENTION: it is advisable to write the associated code on each transponder card so as to avoid having to re-read them later in this menu to find out the associated code.

Barcode/transponder codes can also be read/checked on the test page:



(Path: MENU/INFO/TEST/CARD READER)

Here are some examples.

Example 1: Getting a 10-character code from a 14-character barcode.

Handling a 14-character barcode card where 10 characters identify the alphanumeric RCA code. The 10-character code to be used as search key is to be found in the barcode between the second and eleventh characters.
Set:

- set "Generic Reader" as reader type (see point "2" previously described)
- set the COM on which the reader will be connected (see point "1" previously described)
- set card encoding: 
  a) Card type: "Neutral"
  b) Time-out: 5 seconds (this may vary according to requirements)
  c) Tick the time interval
  d) Length: "10"
  e) From position: "2"
  f) If required, tick automatic print
  g) Initial code not used
  h) "Creating input weighing operation with card", tick it only if the 10 characters obtained are used as plate RCD code or alphanumeric RCD code.

Populate the alphanumeric RCA archive with codes that can be recalled from the cards and which will allow a vehicle to be identified and a weighing operation to be enabled.

Example 2: Using a "TRFid HF405" card to recall RCP numeric codes using transcoding

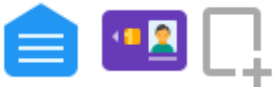
RFid cards have a manufacturer code with a code similar to the following value: E0070000242DC945. The length of the codes is 16 characters maximum.

The TRFid code must be re-encoded to be used as numeric RCP archive.

Set:

- type of reader " HF405" (see point "2" previously described)
- COM on which the reader will be connected (see point "1" previously described)

- card encoding: 
  a) Card type "HF405"
  b) Time-out 5 seconds
  c) Time interval not used
  d) Length not used
  e) From not used position
  f) If required, tick automatic print
  g) Initial code not used

To re-encode, choose "Card encoding": 
(Path: MENU/CARD CODING/NEW)

1) Move the barcode or **transponder** card close to the reader.

The display shows: "CARD ENCODING"

- the "card code" on first line  the code read (example "E0070000242DC945")
- Set the transcoding code (example "1000") on the second line "operating code"

2) Proceed from point "1" for all cards to be encoded
3) Populate the numeric RCP archive with codes that can be recalled from the cards and which will allow a vehicle to be identified and a weighing operation to be enabled.

6.8 Card operation with transponder reader "Nedap"

The transponder reader "Nedap" is a proximity reader able to read a card already a few meters away, this peculiarity makes it necessary a different procedure to be able to trigger an automatic weighing operation with card. The characteristics of automatic weighing with "Nedap" cards are described in the chapter "NEDAP Weighing".

7 TOTALS

Totals are calculated after the output weighing operation has been correctly completed.

The indicator handles the following totals. Each total is calculated starting from a search within the weighing operation archive.

7.1 Product

The total by product code allows searching for products for which weighing operations have been performed within the weighing operation archive.

Data can be extracted by setting the following criteria:

- code
- from the date of the second weighing operation
- to the date of the second weighing operation

Do not fill in the code so that totals for each product code in the archive will be extracted.

Once the search criteria have been set, press the key  to proceed with data extraction or press the key  to cancel the operation.

If there are results for the search, these are displayed.

Pressing the  Print key, all results are printed.

Pressing the  Export key, all results are exported in a csv format file.

It is also possible to perform printing and exporting operation on a single result by selecting it before pressing the key for the operation to be performed.

7.2 Customer

The total by customer code allow searching weighing operations within the archive for customers for whom weighing operations have been performed.

Data can be extracted by setting the following criteria:

- code
- from the date of the second weighing operation
- to the date of the second weighing operation

Do not fill in the code so that totals for each customer code in the archive will be extracted.

Once the search criteria have been set, press the key  to proceed with data extraction or press the key  to cancel the operation.

If there are results for the search, these are displayed.

Pressing the  Print key, all results are printed.

Pressing the  Export key, all results are exported in a csv format file.

It is also possible to perform printing and exporting operation on a single result by selecting it before pressing the key for the operation to be performed.

7.3 Plate

The total by plate allows searching the plates for which weighing operations have been performed within the weighing operation archive.

Data can be extracted by setting the following criteria:

- code
- from the date of the second weighing operation
- to the date of the second weighing operation

Do not fill in the code so that totals for each plate in the archive will be extracted.

Once the search criteria have been set, press the key  to proceed with data extraction or press the key  to cancel the operation.

If there are results for the search, these are displayed.

Pressing the  Print key, all results are printed.

Pressing the  Export key, all results are exported in a csv format file.

It is also possible to perform printing and exporting operation on a single result by selecting it before pressing the key for the operation to be performed.

7.4 Master file data

The total by RcA allows searching RcA codes for which weighing operations have been performed within the weighing operation archive.

Data can be extracted by setting the following criteria:

- code
- from the date of the second weighing operation
- to the date of the second weighing operation

Do not fill in the code so that totals for each RcA in the archive will be extracted.

Once the search criteria have been set, press the key  to proceed with data extraction or press the key  to cancel the operation.

If there are results for the search, these are displayed.

Pressing the  Print key, all results are printed.

Pressing the  Export key, all results are exported in a csv format file.

It is also possible to perform printing and exporting operation on a single result by selecting it before pressing the key for the operation to be performed.

7.5 PRESET WEIGHTS

The total by RcP allows searching the RcP codes for which weighing operations have been performed within the weighing operation archive.

Data can be extracted by setting the following criteria:

- code
- from the date of the second weighing operation
- to the date of the second weighing operation

Do not fill in the code so that totals for each RcP in the archive will be extracted.

Once the search criteria have been set, press the key  to proceed with data extraction or press the key  to cancel the operation.

If there are results for the search, these are displayed.

Pressing the  Print key, all results are printed.

Pressing the  Export key, all results are exported in a csv format file.

It is also possible to perform printing and exporting operation on a single result by selecting it before pressing the key for the operation to be performed.

7.6 General Total

The total by general total allows searching all the performed weighing operations within the weighing operation archive.

Data can be extracted by setting the following criteria:

- from the date of the second weighing operation
- to the date of the second weighing operation

Once the search criteria have been set, press the key  to proceed with data extraction or press the key  to cancel the operation.

If there are results for the search, these are displayed.

Pressing the  Print key, the result is printed.

Pressing the  Export key, the result is exported in a csv format file.

7.7 Partial Total

The total by partial total allows searching all the weighing operations performed since the last partial total performed.

Once the search criteria have been set, press the key  to proceed with data extraction or press the key  to cancel the operation.

If there are results for the search, these are displayed.

Pressing the  Print key, the partial total is printed.

Pressing the  Export key, the partial total is exported in a csv format file.

Pressing the  Reset key, the partial total is deleted.

8 MANAGING CSV FILE



(Path: MENU/CSV)

8.1 Importing data



Copying data from a csv file to the database.

1. Select the memory device where the file has been saved.
2. Select the file to import.
3. Select the destination archive.
4. Press 

8.2 Exporting data



Copying data from a database to a memory device, in csv format.

8.2.1 Exporting selected archives

1. Select the destination memory device where data should be exported to (FlashDisk, USB1 or USB2).
2. Select the archives to export.
3. Press 

8.2.2 Copying



Copying csv files into an external memory device.

8.2.2.1 Copying selected files

1. Select the memory device where the files needs to be copied.
2. Select the files to copy.
3. Press 

8.2.2.2 Copying all files

Select the memory device where the files needs to be copied.

1. Press 

8.2.3 Deleting data

Delete the files from memory device.

Press 

8.2.3.1 Deleting selected files

Select files to delete.

1. Press 

8.2.3.2 Deleting all files

1. Press 

9 MANAGING DATA TRANSMISSION



(Path: MENU/TOOLS/CONFIGURATION/TRANSMISSION)

9.1 NETWORK key:



This key allows adding a new network connection (string, port, protocol type, etc.).

Press the key: 

Enter the name you want to give to the transmission. Example "External Viewer".

Fill in the necessary parameters.

NETWORK		
Parameter	*Value*	*Description*
Scale		Select the scale to which the transmission refers
Port	6001	Setting up the network port
Transmission range (ms)	250	Transmission delay between one string and the next one.
String		Select the desired string
Protocol	Cyclic On request Ack Nak Remote commands	String management mode
Decimal separator	Comma Point	
Checksum mode		Tick to use checksum

Waiting for stable weight		Enabled with selected SASCO1 string. String is transmitted when weight is stable
Waiting time for stable weight	**10**	Enabled with selected SASCO1 string. Waiting time for stable weight.
Green ON input for Norsk		Enabled with Extended-Traffic Light string selected. Enabling green light of traffic light on the display
Reply XI10 configurable sum sc.	**Single scale (S)** Scale components (A+B)	Remote control to request the configurable sum scale weight if enabled
Suspend from input		This allows suspending transmission

Press the key:  to save

Press the key:  to close without saving.

9.2 SERIAL key:



This allows adding a new serial connection (string, port, protocol etc. type)

Press the key: 

Enter the name you want to give to the transmission. Example "External Viewer".

Fill in the necessary parameters.

SERIAL		
Parameter	*Value*	*Description*
Scale		Select the scale to which the transmission refers
Port	COM1	Set the serial port to be used

Transmission range (ms)	250	Transmission delay between one string and the next one
String		Select the desired string
Protocol	Cyclic On request Ack Nak Remote commands	String management mode
Decimal separator	Comma Point	
Checksum mode		Tick to use checksum
Waiting for stable weight		Enabled with selected SASCO1 string. String is transmitted when weight is stable
Waiting time for stable weight	**10**	Enabled with selected SASCO1 string. Waiting time for stable weight.
Green ON input for Norsk		Enabled with Extended-Traffic Light string selected. Enabling green light of traffic light on the display
Reply XI10 configurable sum sc.	**Single scale (S)** Scale components (A+B)	Remote control to request the configurable sum scale weight if enabled
Suspend from input		This allows suspending transmission

Press the key:  to save

Press the key:  to configure COM

Press the key:  to close without saving.

9.3 MPP key:



This allows entering the parameters to manage the MPP transmission.

MPP		
Parameter	*Value*	*Description*
Weighing request	From serial From key	Mpp operation request mode
Data transmission	From serial To Weighing end	MPP operation transmission/reply mode.
Saving Tare		Tick this box to enable saving the tare in MPP string.
Type of reply	Standard Std EN45501:2015 Std and time + indicator number Indicator number Serial number	Type of string to be transmitted.
Indicator number		Set if a "reply type" is selected providing for it.
Transmission to be used		Select serial port or network.
Exclude ACK NACK		Tick to exclude ack-nack management.

Press the key:  to save

Press the key:  to close without saving.

9.4 INDICATOR PARAMETER key:



INDICATOR PARAMETERS		
Parameter	*Value*	*Description*
Indicator number	0	
Sasco progressive number	1	

Press the key:  to save

Press the key:  to close without saving.

10 PRINTED DATA STRING



(Path: MENU/TOOLS/CONFIGURATION/PRINTED DATA STRING)

10.1 NETWORK key:



NETWORK		
Parameter	*Value*	*Description*
Enabled		Tick to enable the printed data string.
Port	6010	Setting up the network port
Protocol	Request Spool Archive	String management mode
Decimal separator	Comma Point	
Checksum mode		Tick to use checksum
Exclude ACK NACK		Tick to exclude ack-nack management.
ACK-NACK Timeout (ms)	3000	Ack-nack waiting time-out (if enabled)
String emission range (ms)	0	Transmission delay between one string and the next one.

Press the key:  to save and exit

Press the key:  to close without saving.

10.2 SERIAL key:



SERIAL		
	Value	Description
Enabled		Tick to enable the printed data string.
Port	COMX	Select one of the ports available on the indicator.
Protocol	Request Spool Archive	String management mode
Decimal separator	Comma point	
Checksum mode		Tick to use checksum
Exclude ACK NACK		Tick to exclude ack-nack management.
ACK-NACK Timeout (ms)	3000	Ack-nack waiting time-out (if enabled)
String emission range (ms)	0	Transmission delay between one string and the next one.

Press the key:  to save and exit

Press the key:  to close without saving.

10.3 Delete data key:



A window is displayed where you are asked whether or not to delete the stored strings.

10.4 General button:



GENERAL		
Parameter	Value	Description
Transmit first weighing operation		If this is ticked, it also allows saving the input weighing operations

Press the key:  to save

Press the key:  to close without saving.

10.5 Printed Data String Format of Flynet Indicator

Below is an explanation of the printed data string of the Flynet indicator (max.2 scales).

The string is transmitted when the weighing operation is completed correctly. String transmission can be enabled via serial or Ethernet.

The following is the structure of the string called "Printed Data String".

Position from - to	Datum	Description
1	$	string start character (24H)
2 - 7	ID	identification number of the weighing operation (6 digits). If the type of weighing consists of input and output operation, the id used is the same for both operations.
8 - 9	Type of operation	this identifies the type of weighing (2 characters). Values: 1 (20 hex - 31 hex) RCD type weighing (ADR) 2 (20 hex - 32 hex) RCA type weighing (RDR) 3 (20 hex - 33 hex) RCP type weighing (PDR) 4 (20 hex - 34 hex) Manual Tare Weighing
10 - 19	Input date	indicator date for input weighing operation (10 characters)
20 - 30	Input time	indicator time for input weighing operation (11 characters)
31 - 40	Output date	indicator date for output weighing operation or preset weight weighing operation (10 characters).
41 - 51	Exit time	indicator time for output weighing operation or preset weight weighing operation (11 characters).
52 - 57	Input Progr. No.	progressive number of the input weighing operation (6 digits)

58 - 63	Output Progr. No.	progressive number of the output weighing operation or preset weight weighing operation (6 digits)
64 - 83	Product Code	product code of the weighing operation (20 characters)
84 - 123	Description	description recalled by the product code (40 characters)
124 - 143	Customer Code	customer code of the weighing operation (20 characters)
144 - 183	Description	description recalled by the customer code (40 characters)
184 - 203	Plate	weighing operation plate (20 characters)
204 - 243	Description	description recalled by the plate (40 characters)
244 - 273	Field 1	weighing operation field 1 (30 characters)
274 – 303	Field 2	weighing operation field 2 (30 characters)
304 - 333	Field 3	weighing operation field 3 (30 characters)
334 - 363	Field 4	weighing operation field 4 (30 characters)
364 - 393	Field 5	weighing operation field 5 (30 characters)
394 - 423	Field 6	weighing operation field 6 (30 characters)
424 - 453	Field 7	weighing operation field 7 (30 characters)
454 - 473	Result	result of the calculation (net weight *coefficient value) or (net weight/coefficient value) (20 digits).
474 - 493	Recall code	this is the code identifying the weighing. It can be a RCD code, or a RCA code, or a RCP code (20 characters).
494	Input scale	this is the name of the scale used for the input weighing operation (one character). Values: A (41 hex) if A scale B (42 hex) if B scale S (53 hex) if sum scale
495	Output scale	this is the name of the scale used for the output weighing operation or preset weight weighing operation (one character). Values: A (41 hex) if A scale B (42 hex) if B scale S (53 hex) if sum scale
496 - 502	Input MPP	this is the MPP code used to save the input weighing operation weights (7 digits).
503 - 509	Output MPP	this is the MPP code used to save the output weighing operation weights or preset weight weighing operation (7 digits).
510 - 549	Input serial number	: this is the serial number of the Diade indicator used to carry out the input weighing operation (40 characters).
550 - 589	Output serial number	: this is the serial number of the Diade indicator used to carry out the output weighing operation or preset weight weighing operation (40 characters).
590 - 609	Weighing status	this is a text that allows identifying input weighing operations and output weighing operations or preset weight weighing operations (20 characters).
610 - 620	First weight	net weight on the selected scale during the input weighing operation (9 digits + 2 characters per unit of measurement)
621 - 631	First A weight	net weight on the A scale during the input weighing operation (9 digits + 2 characters per unit of measurement)
632 - 642	First B weight	net weight on the B scale during the input weighing operation (9 digits + 2 characters per unit of measurement)
643 - 653	First C weight	net weight on the C scale during the input weighing operation (9

		digits + 2 characters per unit of measurement)
654 – 664	First D weight	net weight on the D scale during the input weighing operation (9 digits + 2 characters per unit of measurement)
665 - 675	Second weight	net weight on the selected scale during the output weighing operation or preset weight weighing operation (9 digits + 2 characters per unit of measurement)
676 - 686	Second A weight	net weight on A scale during the output weighing operation or preset weight weighing operation (9 digits + 2 characters per unit of measurement)
687 - 697	Second B weight	net weight on B scale during the output weighing operation or preset weight weighing operation (9 digits + 2 characters per unit of measurement)
698 - 708	Second C weight	net weight on C scale during the output weighing operation or preset weight weighing operation (9 digits + 2 characters per unit of measurement)
709 - 719	Second D weight	net weight on D scale during the output weighing operation or preset weight weighing operation (9 digits + 2 characters per unit of measurement)
720 - 730	Net weight	difference, expressed in absolute value, between First and Second weight (9 digits + 2 characters per unit of measurement).
731	CR	0DH

During the indicator installation it is possible to enable three modes of weight transmission:

1. ***Single*** : transmission takes place before printing and the result of transmission (ACK/NAK protocol) has no effect on the weighing operation. However, the relative printout will bear the indication DATA NOT TRANSMITTED.
2. ***Spool***: transmission takes place after printing and only if this operation is completed correctly (ack/nak protocol). If the spool archive is empty, the weighing operation underway (successfully completed) will be transmitted to the PC immediately.If a transmission failure occurs, the string that should have been transmitted will be saved in the special "spool archive". If the spool archive is not empty, the weighing operation underway will be saved in the spool archive and will be queued up with the existing weighing operations. All weighing operations in the spool archive will be thus transmitted to the PC: transmission begins from the oldest strings and ends with the current one. Each string is deleted from the spool archive only after it has been correctly transmitted. A pause between each string transmission may be enabled by setting up the weighing indicator accordingly. The ack/nak protocol is used for transmission of each string saved. The number of strings that can be saved depends on the memory capacity of the weighing indicator.
3. ***Archive***: the weighing operation underway (correctly completed) will be saved in the spool archive and will be queued up with any operations that have already been saved. In order to retrieve all stored weighing cycles from the weighing indicator, the PC must send the character ENQ (05 hexadecimal = CTRL E) to the weighing indicator. Transmission

begins from older strings and ends with the latest one. Each string is deleted from the spool archive only after it has been correctly transmitted.

N.B.: The PC must send its enquiry when the weighing indicator is not performing weighing operations. On the contrary, the latter will slow down.

When the PC receives a weighing string, it must transmit the ACK character (06H) if the string has been correctly acquired or the NAK character (15Hex) - or any other character differing from ACK - to the indicator if the string should be transmitted again.

Response from the PC must be sent within the time established during installation; in the event that time runs out and no response is given, the terminal will automatically transmit the string again.

The same string can be transmitted twice at the most, after which transmission will be acknowledged as not accomplished.

11 NEDAP WEIGHING

11.1 Introduction

By enabling the "NEDAP" proximity reader, the terminal is able to detect the vehicle's badge before it is correctly positioned on the weighbridge, so the operating sequence required to perform weighing operations is slightly different from the standard one.

First of all, it is necessary to establish a minimum weight threshold below which the terminal avoids reading the badges; this allows the terminal to avoid triggering a weighing operation for a vehicle that enters the range of action of the reader but that is not directed in weighing.

When, on the other hand, a vehicle begins to climb on the weighbridge causing at least the achievement of the set weight threshold, the terminal self-enables to read the badge; after receiving a valid badge and verifying that the read value corresponds to one of the predefined weighing keys (RDR,PDR), the weighing of the vehicle will be triggered.

At the end of the weighing operation, the vehicle must descend from the weighbridge, so that returning below the threshold the terminal can handle a new automatic weighing.

The terminal manages some configuration parameters to try to better adapt the automatic weighing mode with "Nedap" to the customer's needs.

N.B : When enabling/disabling the "Nedap" reader (Transit item) from the configuration parameters of the readers and/or when it is enabled/disabled the "NEDAP Weighing" by the special configuration parameters of the application, it is necessary (after saving the changes), to turn the terminal off and on again.

11.2 Configuration

To access the configuration of the "NEDAP Weighing" press the keys in sequence :



Of the "NEDAP Weighing" it is necessary to define:

Parameter	**Value**	***Description***
NEDAP Weighing		If checked, it allows you to enable the management of automatic weighing with NEDAP.
Weighing threshold (kg)		Weight in kg reached which the terminal waits to receive a Nedap card.
Stable weight timeout (s)	(from 1 to 60)	Maximum waiting time for the weight stability condition necessary for the continuation of the weighing operation. This is useful for vehicles that climb slowly or that contain liquids; if at the end of the time the

		weight is still unstable but valid, the terminal acquires it and proceeds with the weighing.
Badge waiting timeout (s)	(from 0 to 60)	Maximum time available for reading a NEDAP card; the time is triggered when the vehicle, going up in weight, causes the achievement of the Weight Threshold.
Bypass ticket for autom. weighing		If checked, for automatic weighing with NEDAP card the paper weighing receipt will not be issued.
Manual weighing	No Yes Recall of personal data Recall predetermined weights	Select the type of weighing wrench for which manual weighing only is enabled: No: All NEDAP cards will automatically trigger weighing. Yes: all NEDAP cards will recall the associated data but the weighing must be requested manually by the operator. Recall personal data: NEDAP cards that encode an RDR code will recall the associated data but the weighing must be requested manually by the operator; NEDAP cards encoding an PDR code will automatically trigger the weighing. Recall predetermined weights: NEDAP cards that encode an PDR code will recall the associated data but the weighing must be requested manually by the operator; NEDAP cards encoding an RDR code will automatically trigger weighing. N.B: Regardless of the parameter value, you can print manually at any time with the print button.
Error light output		Optionally, select the number of output to enable to report some error conditions that may occur when handling weighing with Nedap. Leave blank if not used.
Error light output duration (s)		Output duration time Error Light.
Waiting vehicle climb (s)		It is a waiting time without conditions applied from the moment in which the vehicle going up in weight causes the threshold to be reached; allows the vehicle to position itself correctly. This

		time cannot end earlier than expected, even if the photocells indicate a correct position of the medium before the time expires.
Additional waiting for vehicle climb (s)		Maximum time to wait for the correct positioning of the vehicle after the Waiting Time For the Middle Ascent. Every second the positioning photocells are checked: if freed, the weighing is triggered.
NEDAP deactivation output		Optionally select the output number to connect to the NEDAP Read DISable (RDIS) input. If connected, the NEDAP will not be able to detect the cards until the Flynet software authorizes it to do so. Leave blank if not used.
Special AutoZero		If checked, when the scale is below the weight threshold without being in the minimum weight, a scale zeroing is automatically attempted.

11.3 Automatic weighing procedure with NEDAP

The automatic weighing process with NEDAP cards will actually be enabled only if after correctly setting all the necessary configuration parameters, the terminal is turned off and on again.

If the Weighing Threshold parameter does not have a value higher than zero, weighing with Nedap cards will not be possible; the operator can only carry out manual weighing operations via flynet terminal.

Otherwise:

- When the scale is discharged (weight lower than the Weighing Threshold value), the terminal is waiting for the set weight threshold to be reached or exceeded; each tile detected in this situation is NOT accepted by the terminal (and not even detected by the NEDAP if the Nedap Deactivation output has been configured and connected).

- When the vehicle begins to rise on the scale causing the threshold to be reached, the terminal waits, for the maximum time established in configuration (Badge waiting timeout), to detect a Nedap card. At the end of the time without a card having been detected, the terminal invites the operator to carry out a manual weighing or to drop the vehicle off the scale; otherwise, the weighing procedure continues automatically as indicated in the point below.

- Having read the card and verified that it corresponds to one of the predefined RDR or PDR weighing keys, the terminal starts a waiting time to allow the vehicle to fully get on the scale and position itself correctly; during this time (Waiting vehicle climb) no conditions are checked.

- After the waiting time for the vehicle climb, two different conditions may occur based on the value of the Manual Weighing parameter and possibly on the type of key encoded by the Nedap card: the vehicle must be weighed manually by the operator using the appropriate button on the Flynet, or the vehicle must be weighed automatically. In the first case, the terminal displays a special message on the top of the Flynet display inviting the operator to carry out the weighing: manual weighing is handled as a normal standard weighing. In the second case, however, the weighing procedure continues automatically as indicated in the point below.

- After the waiting time for the climb of the vehicle, if the positioning photocells are still covered (the vehicle is not correctly positioned), the terminal applies any additional time (Additional waiting for the vehicle climb) to allow the vehicle to position itself correctly. If the photocells are not released within the useful time the terminal stops weighing, otherwise it continues as indicated at the point below.

- Once the condition of free photocells has been met, the terminal waits to detect a valid and stable weight to acquire it and continue the weighing operation. The invalidity of the weight causes the interruption of the weighing operation, while in case of valid but not stable weight the terminal waits for the occurrence of the condition up to the maximum defined time (Stable Weight Timeout); at the end of the time if the weight is valid it is still acquired and the weighing operation continues as indicated in the point below.

- Automatic weighing may or may not include the physical printing of the weighing receipt (Bypass ticket for automatic weighing), for the rest it is the same as a normal standard weighing.

- At the end of the automatic weighing or at the end of the manual weighing, the vehicle must get off the scale so that the scale returns below the Weight Threshold and the terminal is thus able to take care of another weighing with Nedap card.

11.4 Manual Weighing Button

When NEDAP Weighing is enabled, the metrology key is present on the metrology key bar



The key normally appears gray because it is not enabled; it takes the colors only when it is enabled, that is, when the terminal is waiting for a Nedap card. By pressing this button it is possible to interrupt the wait for the card: the vehicle on the scale must be weighed manually or must get off the scale without carrying out any weighing.

11.5 Error signals when weighing with NEDAP card

It is possible that during weighing with Nedap conditions and error signals are detected, but errors are always shown on the display and can be:

"BADGE NOT DETECTED, manual weighing": no Nedap card has been detected within the set time, so the vehicle present on the scale must go down or must be weighed manually by the operator.

"Descend or weigh manually": the automatically triggered weighing has been interrupted, so the vehicle present on the scale must go down or must be weighed manually by the operator.

11.6 Special cyclic string "ExtendedMessage"

This special string has been designed specifically for when "NEDAP Weighing" is enabled; in fact, by connecting the Flynet terminal to an additional display (RD52HL/RD100) it is possible to show the driver the weight on the scale and the outcome of the weighing operation carried out. To enable the string, follow the path indicated in the "Data Transmission Management" chapter of this instruction manual.

Normally the additional display shows the net weight present in the scale during the weighing procedure and only in some cases displays, alternating net, some error or information codes.

Code	Description
111111	Weighing finished correctly
222222	Printer error (printer turned off, disconnected, paper out of paper, etc. at the time of physical printing)
333333	• Invalid weight (overload, negative, etc.). • Vehicle positioning error (if there is input of positioning photocells and at the time of the weighing request the photocells are closed). • Expired card code reading time.
444444	Card error (invalid and/or not accepted)

All codes are flashing, meaning that the special message is alternated with the net weight value currently present in the weighbridge. To return to the fixed display condition of the net weight, it is necessary to fall below the set weight threshold.

11.7 Notes for NEDAP management and assembly

When the output of NEDAP Deactivation is not configured and/or connected correctly to the Nedap, if a card is received when the weight in the scale is below the set threshold it is not accepted, and it is possible that this card is not received even after the weight has reached or exceeded the threshold. This is because the Nedap transponder has a limit that does not allow it to reread the same card without the data flow having been interrupted for a certain time (this means that you should "hide" the card from the Nedap and make it fall within its range of action after a few seconds). From what has been said it is clear how important it is to choose an optimal threshold value to allow you to read the card always beyond the set threshold, and even better to use the Nedap Deactivation output that directly inhibits the reading of the Nedap transponder when the weight is below the threshold.