OPERATOR'S MANUAL



Smart Control



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IMPORTANT INFORMATIONS



If you press the STOP button on the Smart Control, you will cut off power to all the outputs of the Smart Box. The manufacturer of the machine/the plant or the person in charge with the Incorporation/Installation of the same must check that this condition puts the machine or the plant in a safe status.



Electronic Frequency Reaction Time (E.F.R.T.) of the single electronic system made by Dinamica Generale is equal to 2 Seconds, and represents the time from the moment in which the STOP button of the Smart Control is pressed to the moment in which the Smart Box enables the solenoid valve; this time does not include the actuation time of the solenoid valve because it depends on intrinsic characteristics of the solenoid valves used, which may vary depending on the type, make and model.

Downtimes of mechanical systems of the machine or the system and the activation of the safe status of such machines (in which the Smart Control/Smart Box kit is installed) must therefore be checked and guaranteed by the manufacturer or the system integrator, who designs the system based on the characteristics of the valves used and the checks carried out on the same. Therefore, the Frequency Reaction Time of the entire system is equal to the EFRT of the Smart Control/Smart added to the time of actual actuation of the solenoid valves used.

It is, therefore, the responsibility of the manufacturer or the system integrator to verify that the total FRT is deemed sufficiently safe and adequate to the dynamics of the phenomenon and the need to actually stop all critical functions of the machine or the system.



When the Smart Control exits the radio coverage with the Smart Box, in the absence of communication the Smart Box de-energizes all the valves after a timeout of 2 seconds. The manufacturer of the machine or the installer must check that this condition puts the machine or the system in a safe status.

When the Smart Control returns within the radio coverage with the Smart Box, the solenoid valves are not reactivated automatically, but remain deenergized as long as the user enables them voluntarily



The Smart system is a remote control system for general use which can be adapted to different types of machines, systems or applications; therefore, it is the responsibility of the manufacturer or the system integrator to find and install the correct safety devices on the machine or the system in accordance with current Safety Standards.



The manufacturer of the machine manufacturer or the system integrator must install the system correctly and test the proper functioning of the same.

Installation and testing must be done by qualified personnel.

Dinamica Generale declines every responsibility in case of not correct installation or use of the system.

General Informations SMART Control RevB1



It is responsibility of the user to activate functions even if he has not the complete visibility of the machine.

Dinamica Generale declines any responsibility for damages to things or persons caused by an inadequate use of the Smart Control / Smart Box system.



The use of unapproved components or accessories in the systems sold by dinamica generale and its subsidiaries is strictly prohibited. Unapproved components are defined as any component not inspected and sold by dinamica generale. This also includes any component modified from its intended use and/or any component exhibiting observable damage or defect.

Use of non-conforming parts, assemblies and accessories may lead to injury or death.



READ ALL INSTRUCTIONS

Failure to follow these rules can result in serious personal injury.

TRANSMITTER OPERATION AND FEATURES



Do not operate the system until you are familiar with radio-controlled operation. If you are not familiar with radio-controlled operation, contact your supervisor before attempting to use the radio control system.



Press the STOP button to lock the system in a state of arrest. By pressing and holding this button you will stop all the functions.

If the system has been properly installed and set up according to the installation requirements, the stop button will de/energize all the outputs of the system; the manufacturer of the machine or the system integrator will have to ensure that such a state is a safe state, while it remains the responsibility of the installer to verify that these conditions are actually implemented during system testing.

INSTALLATION



READ ALL INSTRUCTIONS! Failure to follow the SAFETY RULES can result in serious personal injury.

Before starting this installation, ensure that the power has been disconnected and that all applicable safety precautions are followed.



Before putting the system into service, the following testing procedure must be performed:

- Make sure there is no possibility to operate any function (hydraulic or electric)
- Disconnect all the cables from hydraulic valves
- Apply power to the system
- Verify that there is communication between Smart Control and Smart BOX.
- Verify that all led lights on plugs for valve connection are turned OFF when any hydraulic function is activated.
- Press each button to activate hydraulic function one at the time and check that the led light on the correspondent plug is turned ON.



During assembly and maintenance of the Machine or the system to which the Smart Box is connected, the latter must be disconnected from the power supply to prevent accidental activation of machine or system functions.



If the Smart Control/Smart Box is used to drive (for example, but not limited to) moving parts or other functions of the machine/system that involve dangerous situations, it is the responsibility of the installer or the system integrator or the installer to install on the machine/system at least one emergency button in compliance with IEC 60204 or ISO 13850 compliant, in suitable positions that are easy to reach at all times and immediately available; Dinamica Generale strongly recommends the installation of at least one emergency button.



The Smart Control/Smart Box may only be installed using the cables supplied by Dinamica Generale. Loose or damaged wires may cause accidental activation of machine or system functions



Dinamica Generale recommends a periodic check of the condition of the wires and the general state of the system.



Install the Smart Box or Smart Control device on the machine/system, in locations far from heat sources that might bring the devices to temperatures greater than those stated in the technical specifications



DO NOT INSTALL IN HIGH VIBRATION AREAS. The life of this apparatus might be shortened through long exposure to intense shaking or vibration.

ANTENNA LOCATION



The antenna is one of the most important components of a radio receiving system.

Proper placement of the receiver antenna will ensure reliable operation under the most severe conditions. A direct 'line-of-sight' path between the transmitter and receiver antenna provides the best performance.

Dinamica Generale denies all liability for damages to people or property due to tampering, alteration the wiring or of any part of the kit supplied by Dinamica Generale or by failure to install the emergency buttons as provided by current standard IEC 60204 or ISO 13850.

General Informations SMART Control RevB1

United States (FCC)

This product contains an XBee / XBee-PRO RF Modules that comply with Part 15 of the FCC rules and regulations. Operation is subject to the following two conditions: (i.) this device may not cause harmful interference and (ii.) this device must accept any interference received, including interference that may cause undesired operation.

- Model XBee Radio, FCC ID: OUR-XBEE
- Model XBee-PRO Radio, FCC ID: OUR-XBEEPRO

Check the label of your device to verify which kind of XBee module is included.

RF exposure

<u>WARNING!</u> To satisfy FCC RF exposure requirements for mobile transmitting devices, a separation distance of 20 cm or more should be maintained between the antenna of this device and persons during device operation. To ensure compliance, operations at closer than this distance is not recommended. The antenna used for this transmitter must not be co-located in conjunction with any other antenna or transmitter.

Canada (IC)

This product contains an XBee or an XBee-PRO RF Modules:

- Model XBee Radio, IC: 4214A-XBEE
- Model XBee-PRO Radio, IC: 4214A-XBEEPRO

Check the label of your device to verify which kind of XBee module is included.

JAPAN

This product contains an XBee or an XBee-PRO RF Modules:

- Model XBee Radio, ID: R201WW07215214
- Model XBee-PRO Radio, ID: R201WW08215111

Check the label of your device to verify which kind of XBee module is included.

BRAZIL (ANATEL certification)

The XBee and XBee-PRO RF modules with 802.15.4 firmware (models noted in conformity information below) comply with Brazil ANATEL standards in Resolution No. 506.

This product contains an XBee or an XBee-PRO RF Modules:

Model XBee Radio:



Model XBee-PRO Radio:



Check the label of your device to verify which kind of XBee module is included.

General Informations SMART Control RevB1

TECHNICAL DATA

SMART CONTROL

Working temperature:	-20 / +50 °C
Dimensions:	210 x 95 x 36 mm
Weight:	400 gr
Case:	PC-ABS V0
Protection Grade:	IP 65
Display:	LCD Full Color HD 4,3"
Memory:	8Mb RAM 2Mbyte Flash
Interface:	USB
Resolution:	1 - 2 - 5 - 10 - 20 - 50
Accuracy:	< +/- 0,015 % f.s.
Frequency of communication:	2,4 GHz

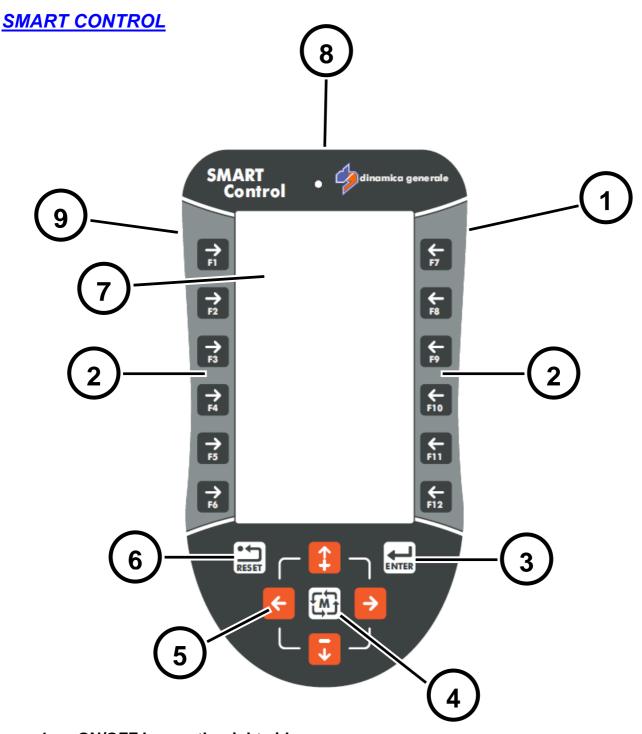
BATTERY

Battery:	Lithium 3,7 V 3000 mAh
Charging time	8 hours
Discharge time:	5 hours (depending on the mode of use)
Temperature for charge:	0 / +50 °C

SMART BOX 2.0

Working temperature:	-30 / +65 °C
Power supply:	12 – 32 Vdc
Dimensions:	220 x 155 x 80 mm
Weight:	1100 gr
Case:	ABS
Protection Grade:	IP 67
Maximum current:	16Adc total (Max 3Adc on each output) (Max 6Adc on outputs 11-12-23 and 24)
Outputs:	24 Solenoid Valve
Inputs:	1 connector for load cells
Proportional output:	1 proportional output (on the optional connector)
Power protection fuse:	Fuse 18 A
Option outputs available only for WH version	1 output for external sound alarm 1 output for weight repeater
Communication mode	Wireless 2,4GHz By cable L=4.1mt

CONFIGURATION



- 1. ON/OFF key on the right side
- 2. Function and setting keys
- 3. ENTER key
- 4. Key for change the working mode *
- 5. Directional keys
- 6. RESET key
- 7. Display
- 8. STOP key
- 9. USB port

* On H version (only hydraulic), this button allows to enter the configuration menu



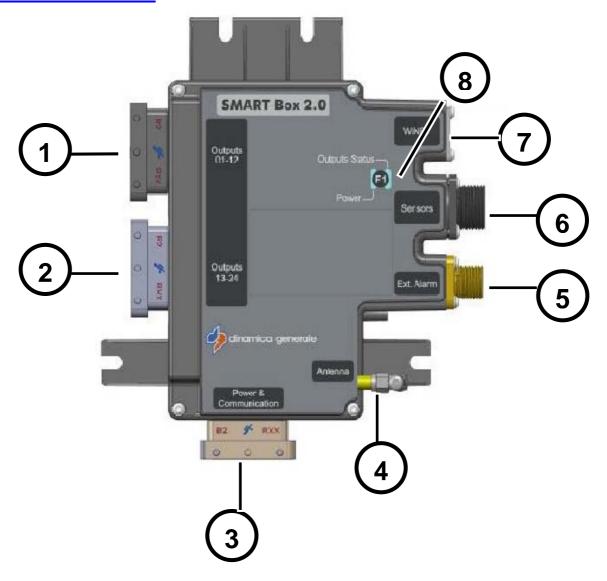
- 1. Working mode
- 2. Page Number
- 3. % of battery load
- 4. Unit of measurement

Based on the version used, there are different working modes available:

Mode	Description	Version
M1	Weighing Mode	WH
M2	Weighing/Hydrailic Mode	WH
М3	Hydraulic Mode	WH

M1 Hydraulio	c Mode	Н
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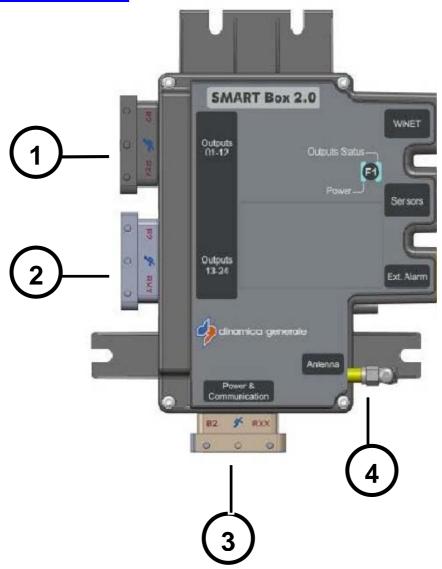
SMART BOX 2.0 - WH



- 1. Connector OUTPUT 1 12
- 2. Connector OUTPUT 13 24
- 3. Connector for communication, power and options.
- 4. Antenna
- 5. Connector for external sound alarm
- 6. Connector for load cells
- 7. Connector for Weight Repeater
- 8. Key for operation without Smart Control

F1	Pressed for 3 seconds, with Smart Control off or not communicating, it allows to visualize the total weight on the weight repeater and then to set the tare.	
Power	The Red Led on shows that the device is powered	
Output Status	The Green Led on shows that it's possible to activate the outputs	

SMART BOX 2.0 - H



- 1. Connector OUTPUT 1 12
- 2. Connector OUTPUT 13 24
- 3. Connector for communication, power and options.
- 4. Antenna

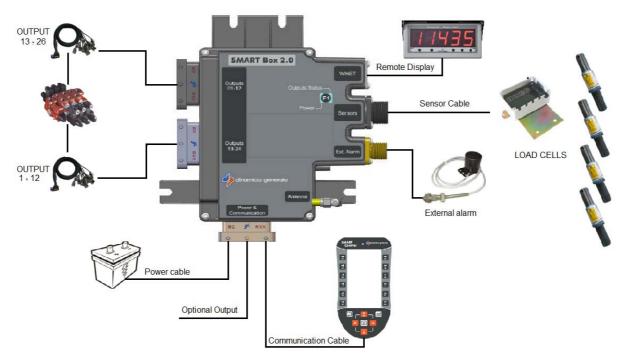
Power	The Red Led on shows that the device is powered
Output Status	The Green Led on shows that it's possible to activate the outputs

KEYBOARD

மு	ON – OFF	Press this key in order to turn on / turn off the device.
→ F1 ← F12	FROM F1 TO F12	Setting key variable in function of working mode.
(MODE	In the WH version, press this key in order to change the working mode (WEIGHING MODE / WEIGHING MODE AND HYDRAULIC COMMAND / HYDRAULIC COMMAND MODE). This key is used only on the W-H version.
		In the H version, press this button to enter the configuration menu.
←	LEFT	During the use of the device press this key in order to switch to the next page
→	RIGHT	During the use of the device press this key in order to switch to the previously page
		During the weight programming, pressing this key in order to decrease the value
<u>.</u>	MENO / GIU'	2- During the use of device, press this key in order to move down.
•		3- During the execution of load/unload, press this key in order to switch to the next component.
		During the weight programming, pressing this key in order to increase the value
1	PIU' / SU	2- During the use of device, press this key in order to move up.
		3- During the execution of load/unload, press this key in order to switch to the previous component.
ENTER	ENTER	Press this key in order to confirm.
RESET	RESET	Press this key one time in order to exit from each menu.

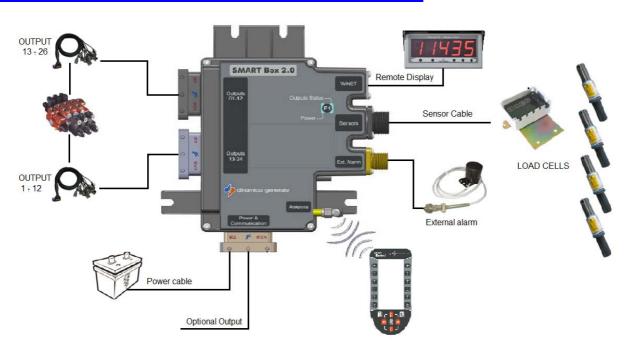
CONNECTION DIAGRAMS

CONNECTION BY CABLE - WH VERSION

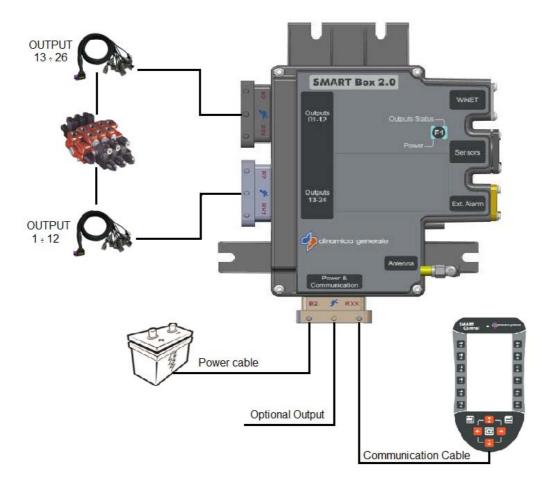


Weight Repeater: connect the Weight Repeater to the SMARTBox 2.0. The weight displayed is the same as that displayed on the SMARTControl. If on the SMARTControl the weight is not displayed, on the weight repeater appears "-----"; With Smart Control switched off or disconnected, it allows to visualize the total weight by pressing the F1 key for about 3 seconds.

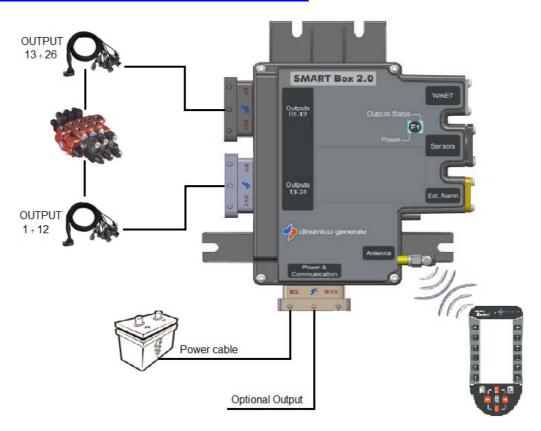
CONNECTION WITHOUT CABLE - WH VERSION



CONNECTION BY CABLE – H VERSION



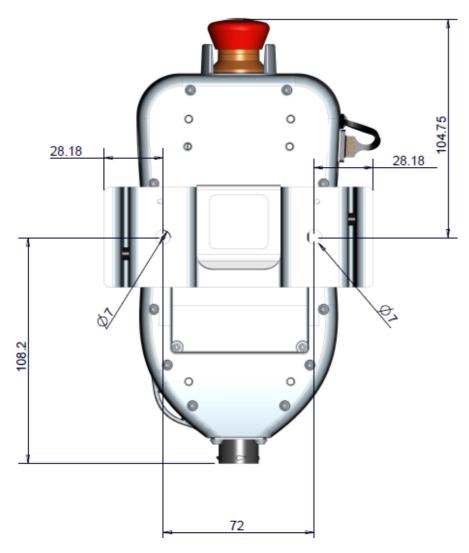
WIRELESS CONNECTION - H VERSION



INSTALLATION

SMART CONTROL WITH STANDARD BRACKET

Install the Smart Control by fixing the support bracket with the M5-M6 screws. The screw head height should be less than 5 mm. The bracket must be fixed at a safety distance from the mechanical bodies (for example in the cabin or on the cart).





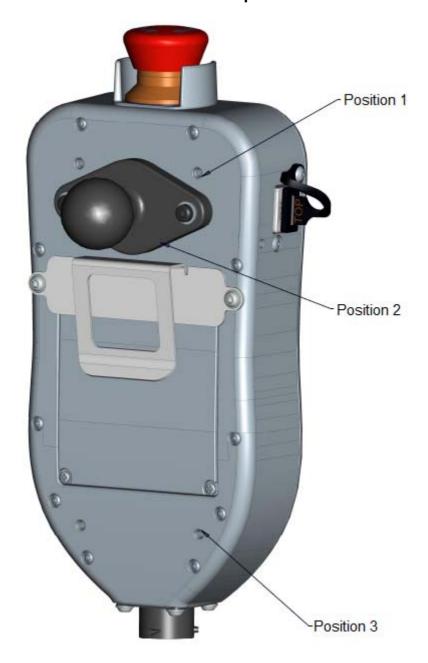




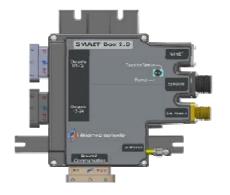


SMART CONTROL WITH SPHERE

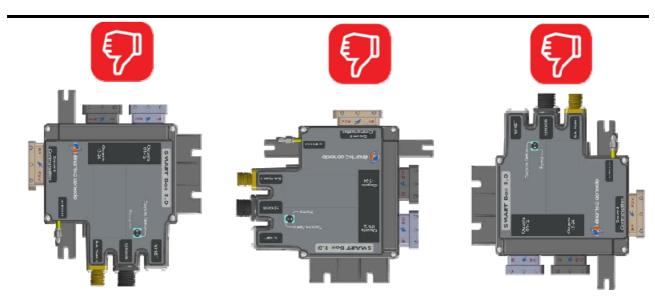
Fix the size B sphere (1") to the multidirectional bracket using the self-tapping M3,5x15 screws for plastic, maximum tightening torque 3 N m. The double coupling must be fixed at a safety distance from the mechanical bodies. The sphere can be mounted in three different positions:



SMART BOX 2.0 FIXING







SAFETY CONTROLS OF THE DEVICE (VERSION H AND WH)

POSITIONING OF THE DEVICE

It is possible to choose an accessory to use as aid for safety:

1- Support bracket

The hydraulic part functions only when the device is inserted into the supplied support bracket. If the device is not inserted into the support, the valves active at that moment will be deactivated for safety reasons.

2- Power supply cable

The hydraulic part functions only when the supplied cable is connected to the device. If the cable is not connected, the valves active at that moment will be deactivated for safety reasons.

3- Both

The hydraulic part functions only when the cable is not connected or the device is not inserted into the support bracket. If both accessories are not inserted, the valves active at that moment will be deactivated for safety reasons.

1 When the device is removed from the support bracket, the message: "Incorrect position, put the Smart Control in the bracket" appears.







2 When the power supply cable is disconnected, the message: "Incorrect position, connect the power supply cable".



3 When the device is removed from the support bracket or the power supply cable is disconnected, the message: "Incorrect position, insert the Smart Control into the support or connect the power supply cable" appears.



When the device is inserted correctly, the message: "Correct position, press ENTER to continue" appears.



By pressing ENTER, it is possible to use again the hydraulic part.



<u>COMMUNICATION BETWEEN THE SMART CONTROL AND THE SMART</u> BOX

1 If the SMART Control does not communicate with the SMART Box, the valves active at that moment will be deactivated for safety reasons.



2 When the communication is restored, the message "Radio communication available: press enter to allow checking the exits".



CONFIGURATION MENU

CARD MANAGEMENT (WH VERSION)

1 Turn on the SMART Control device pressing the ON/OFF key on the right side.



2 Connect the USB key to the device.



It is possible to connect or disconnect the USB Key at any time, without restarting the device.

3 Press the CONFIG key (F11).



4 Press the "Card Management" key (F2) in order to transfer the data through the USB key.





If the message "DT not enabled" doesn't appear, it is necessary to enable it by entering the Configuration Menu (see the paragraph: BASE PARAMETERS - point "I" Data Transfer).





If the USB key is not connected, the message "Please Wait" appears, followed by the message "USB Error".

The device returns to TOTAL WEIGHT MODE.



EMPTY USB KEY

1 If the USB Key is empty, the message "Please, Wait" followed by "card.bin not found" appears.



2 The message "Reprogram the USB key by the DTM" appears.



3 Next the message "Please, remove the USB key and close the connector" will appear on the screen. After that the device creates a file card.bin on the USB key and it goes back to TOTAL WEIGHT MODE.



In this case it is essential to reprogram the USB by the DTM.



USB KEY NOT FORMATTED

1 If the USB Key is not formatted for this type of device, the message "USB key not Formatted!" appears.



2 The message "Format USB Key?" appears.

Press the ENTER key to confirm, otherwise press the RESET key to cancel the operation.



3 If you want to format the USB Key, the message "Reprogram the USB key by the DTM" appears.



4 Finally, the message "Formatting...Please Wait" appears.

PROGRAMMING DATA TRANSFER FROM PC (DTM)

- 1 Connect a USB Key to the PC and program it with the DTM Software.
- 2 Connect again the USB key to the device and enter into the menu "Card Management" from configuration menu.

3 The message "Please, Wait" appears on the screen followed by "No executions to download" or "Downloading Executions on the USB key"



See next paragraph



4 The message "New programmation available. COPY NEW DATA?" appears.



- Press the ENTER key in order to replace all the programs (Recipes/ Unloading Programs) saved on the device with the new ones saved on the USB key. Copy and paste all the data from the USB key to the memory of the device.
- Press the RESET key if you do not want to delete all the programs (Recipes/ Unloading Programs) on the device.
- 5 The device returns to TOAL WEIGHT MODE.

SAVING EXECUTION DATA ON THE USB KEY

1 After the execution of recipes or unloading programs, it is possible to save the data entering in the "USB KEY" menu.





If the message "Different Database: it is not possible to download the execution data" appears on the screen, it is necessary to reprogram the USB key from the PC/DTM.



If the message "Insufficient Memory" is shown, it is necessary to reprogram the USB key from PC/DTM.

2 Press the ENTER key to confirm. The message "Downloading Executions on USB key" appears.





If there aren't any executions to download the message "No Executions to Download" appears.



3 The percentage of the download appears.



Please wait the complete download (100%)



4 The message "Executions downloaded!" appears.



5 Finally the message "Please, remove the USB key and close the connector" will be shown.

The device goes back to TOTAL WEIGHT MODE.



BASE PARAMETERS WH VERSION

1 Turn on the SMART Control device pressing the ON/OFF key on the right side.



2 Press the CONFIG key (F11).



3 Press the "Base Parameters" key (F3) in order to set the parameters.



4 It is possible set the following parameters using the functions keys from F2 to F12:

Press the key in order to switch to the next page.



a) Auto OFF

(Range: 0-60; Default: 0)

It's the time after which, when the device is in stand-by mode, it automatically

switch off.

If the value set is 0, the device will not switch off automatically.

Each set value from 1 to 60 corresponds to the minutes after which the device will switch off automatically.

b) Save proportional value

(Range: Yes-No; Default: No)

Enable saving % proportional output value in case of device shutdown.



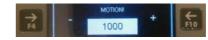
Press F2 or F8 to choose the value.



Press F3 or F9 to choose the value

c) MOTION!

(Range: 0-10000; Default: 1000)
Alarm that indicates sudden weight changes that could cause damage to the system.

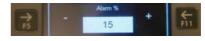


Press F4 to decrease the value or F10 to increase it.

d) Alarm %

(Range: 0-50; Default: 15)

Setting of the percentage value of the acoustic alarm the controls the weighing. The activation of the pre-alarm (intermittent acoustic alarm) corresponds to this value.



Press F5 to decrease the value or F11 to increase it



This phase is called PREALARM and the acoustic signal is intermittent. By setting 15, the intermittent alarm is activated when the value to be loaded/unloaded is minus 15%. For example when programming the loading/unloading at 100 and the percentage at 15 the value that is read is 85 and therefore the intermittent alarm will start.

e) Resolution

(Range: 1-2-5-10-20-50; Default: 1)
Resolution of the weight visualization setting that is seen on the display.



Press F6 or F12 to choose the value.

f) Language

(Default: English)

Language selection used for the visualization of the messages. Languages available:

- English
- Italian
- French

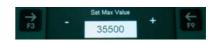


Press F2 or F8 to choose the language.

g) Set Max Value

(Default: 15000)

The value of this parameter is linked to the capacity of the machine, dinamica generale suggests to set the maximum capacity of the machine.



Press F3 to decrease the value or F9 to increase it

h) Stabilization time

(Default: 0)

With the function key, it is possible set the seconds that you have at your disposition when you load a component during the execution of the recipe.



Press F4 to decrease the value or F10 to increase it.



This function is normally used for those components that are loaded with the loader. When the mixer is loaded with a loader it is difficult to put in the right amount that is programmed on the device, usually the quantity is a little less.

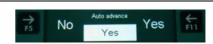
A count down on the upper display advises the operator that he has N seconds for load the component on the mixer before the device is passing on to the next component. The weight will be saved after the STABILIZATION TIME in order to have the real weight.

i) Auto advance

(Default: Yes)

By setting "AUTO: Yes" the passage from one Component/Unloading Point to the other is automatic once the set value has been reached and once the alarm time has passed.

By setting "AUTO: No" the passage from one Component/Unloading Point to the other will have to be made manually by pushing the ENTER key.



Press F5 or F11 to choose the value.

j) Buzzer enable

(Yes-No; Default: Yes)

Enabling this parameter allows the activation of a sound when you press a key of the device.



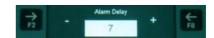
Press F6 or F12 to choose the value.

k) Alarm delay time

(Range: 0-60; Default: 7)

Programming of time of the acoustic alarm at the end of a loading/unloading.

The number that is set corresponds to the alarm time, expressed in seconds, when the set value is reached.

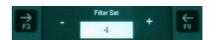


Press F2 to decrease the value or F8 to increase.

 Setting of the filter for the weight stabilization

(Range: 0-8; Default: 4)

If the weight on the display is unstable, the parameter has to be increased; if, on the other hand, the weight is too stable (slow update) the visualization will be improved if this value is decreased.



Press F3 to decrease the value or F9 to increase.

m) Data Transfer

(Default: No)

Set "Data Trans: Yes" if you want the recipe to be read directly by the USB key and subsequently memorize the executions.

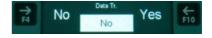
In this case:

- it is not possible modify the recipes or the components;
- it is possible connect a load program to an unload program.

Set "Data Trans: No" if you do not want to read the recipe directly from the USB key, but only save the executions on the internal memory of the device.

Once the value is been changed, the message "Restart.." appears.

Press the ON/OFF key in order to restart the device and permanently saving the parameter.



Press F4 or F10 to choose the value.

n) Standby timeout

(Range: 0-60; Default: 1)

It indicates the inactivity time before that the device goes in standby.

If you set the value to 0, the function is disabled and the device will never go in standby.

Any value that you set from 1 to 60 corresponds to the minutes before that the device will remain active, after it will go in standby.



Press F5 to decrease the value or F11 to increase.



BASE PARAMETERS H VERSION

1 Turn on the SMART Control pressing the ON/OFF button on the right side.



2

Press the button to enter the configuration menu.

3 Press the button "Base Parameters" (F3) to set the parameters.



4 It's possible to set the following parameters using the buttons from F2 to F12.



a) Auto OFF

(Range: 0-60; Default: 0)

It's the time after which, when the device is in stand-by mode, it automatically switch off.

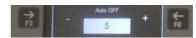
If the value set is 0, the device will not switch off automatically.

Each set value from 1 to 60 corresponds to the minutes after which the device will switch off automatically.

b) Activate the saving of the proportional value

(Range: Yes-No; Default: No)

It saves the % value of the proportional output in case of the device switch off .



Press F2 or F8 to choose the value.



Press F3 or F9 to choose the value.

c) Language

(Default: English)

The set language is referred to the displayed messages. Available languages:

- English
- Italian
- French

d) Enable a buzzer

(Yes-No; Default: Yes)

Activating this parameter, you enable an internal buzzer pressing the hydraulic function button.



Press F5 or F11 to choose the value.

Press F4 or F10 to choose the

language.

e) Standby Time Limit

(Range: 0-60; Default: 1)

It's the inactivity time before the standby mode of the device.

If the value set is 0, the device will never go in standby mode.

Every value set from 1 to 60 corresponds to the minutes of inactivity of the device before the standby mode is activated.



Press F6 to decrease the value or F12 to increase it.



PASSWORD MENU

1 Turn on the SMART Control device pressing the ON/OFF key on the right side.



2 Press the CONFIG key (F11).



Configuration SMART Control RevB1

3 Press the "Password menu" key (F4) in order to set the password.



4 Enter the number of the password with the function keys and press the ENTER key.



LIST OF PASSWORDS THAT CAN BE SELECTED (AVAILABLE ON SMART CONTROL WH)

- 12 Calibration
- 45 Calibration with a reference weight
- 46 Reverse calibration with a reference weight
- 67 Modification of the weight in % (fine calibration)
- 99 Setting of the maximum weight (over-range)
- 155 Set of default values
- 454 Setting of kg / pounds
- 500 How to set the working mode at the end of the loading
- 700 Choice of communication mode (RF via Xbee or serial via cable)
- 789 Deleting of load/unload program from external flash memory
- 790 Clearing of all components and unloading points
- 791 Loading of the names for default components and unloading points
- 880 How to block the weight
- **1357** CARD formatting

PASSWORD 12: HOW TO SET THE CALIBRATION VALUE

1 From the modality Set password, select number 12 with the function keys.



2 Confirm with the ENTER key.



3 With the function keys change the value of this parameter if necessary.



The calibration value depends on the number and capacity of the load cells. Contact dinamica generale® for further details. If a complete system has been bought, the DG devices are already calibrated.



4 Push the ENTER key to confirm the new calibration parameter.



5 The device will return to Set password.

Configuration SMART Control RevB1

<u>PASSWORD 45: HOW TO SET THE CALIBRATION WITH A REFERENCE</u> WEIGHT

1 From the modality Set password, select number 45 with the function keys.



2 Confirm with the ENTER key.



- 3 The message "Calibration Step 1 Set Zero" will appear for 2 seconds, it means that the calibration is starting.
 - Empty completely the mixer and then confirm with the ENTER key.



- 4 The message "Please Wait" will appear, the ZERO value will be saved.
- 5 The message "Calibration Step 2 set calib.value" will appear for 2 seconds, it means that the second step of calibration is starting..



6 Load the weight on the mixer and insert the value of the reference weight placed in the mixer (in Kg or Pounds) with function

keys, then confirm with



- 7 The message "Please Wait" will appear, the NEW CALIBRATION value will be saved.
- 8 If the message "Setting Ok!" will appear, it means that the calibration procedure has been finished successfully.

 If the message "E" will appear, it means that the calibration procedure has NOT been finished successfully; so retry the operation from the point 1.



9 After the end of the procedure the device returns to Set password.

PASSWORD 46: INVERSE CALIBRATION WITH REFERENCE WEIGHT

1 In set password mode, set number 46, with the function buttons.



2 Confirm pressing ENTER button.



Configuration SMART Control RevB1

3 The message displayed is "Calibration Step 2 set the calibration value": this means that the second step of calibration is starting.

4 Load the reference weight on the machine and set the weight value (in Kg or Lb) with the function button, then confirm pressing

the button



- 5 The message displayed is "Please wait", the NEW CALIBRATION value will be saved.
- 6 The message displayed is "Calibration Step 2 Set Zero".

Take off the reference weight from the machine and confirm pressing ENTER button.

7 If the message displayed is "Setting Ok!", it means that the calibration procedure is successfully finished.

If the message displayed is "-E-" it means that the calibration procedure is NOT successfully performed; Repeat the procedure from step 1.

8 At the end of the calibration procedure, the device will return in the set password mode.

PASSWORD 67: HOW TO MODIFY IN PERCENTAGE THE WEIGHT

1 From the modality Set password, select number 67 with the function keys.



- 2 Confirm with the ENTER key.
- 3 With F2 or F8 keys select the percentage of the weight modification.

 The interval that can be set is 10,0% + 10,0%.



- 4 Press ENTER key in order to confirm the value of the parameter.
- 5 After the message SETTING OK! appears the device returns to Set password.

PASSWORD 99: HOW TO SET THE MAXIMUM WEIGHT

1 From the modality Set password, select number 99 with the function keys.



The value has to be higher than the one set in password 12.



2 Confirm with the ENTER key.



3 With the function keys change the value of this parameter if necessary, the range can be set at 100÷99999.

The value of this parameter is linked to the capacity of the machine, dinamica generale® suggests to set the maximum capacity of the machine.



4 Push the ENTER key in order to confirm the value of the parameter.



5 The device will return to Set password.

PASSWORD 155: SET OF THE DEFAULT VALUE

1 From set password mode, set number 155 with the function buttons.



2 Confirm pressing the ENTER button.

3 The message displayed is "Set Def Val?".

Press the ENTER button if you want to set the default value. In this case the message "Setting OK!" appears.

Press the button RESET if you want to exit without setting the default values.

5 The device will return to Set password.

PASSWORD 454: HOW TO SET THE UNIT OF MEASURE

1 From the modality Set password, select number 454 with the function keys.



2 Confirm with the ENTER key.



3 Selection of the unit of measure in kg or pounds with the function keys.



- a) By setting 0=Kg the weight will be visualized in Kilograms.
- b) By setting 1=Lb the weight will be visualized in Pounds.



One pound = 0,454 kg

4 Push ENTER key in order to confirm the value of the parameter. The device will return to Set password.



Configuration SMART Control RevB1

<u>PASSWORD 500: HOW TO SET THE WORKING MODE AT THE END OF</u> THE LOADING

(Default: Total)

1 From set password mode, set the number 500 with the function buttons.

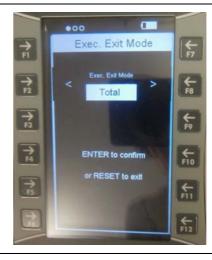


2 Confirm with the ENTER button.



3 Press the function buttons to modify the value (Total / Recipe / Menu).

Press the ENTER button to confirm.



4 The device returns in the set password mode.

PASSWORD 700: CHOICE OF COMMUNICATION MODE

1 From the modality Set password, select number 700 with the function keys.



2 Confirm with the ENTER key.



- 3 Select the communication mode using F2 or F8 keys:
 - Set "RF" for the wireless communication.
 - Set "Cable" for the wire communication.

Press ENTER in order to confirm or RESET to exit.

NOTE: when the communication mode is changed, it's necessary to switch off and turn on both the SMART Control and the SMARTBox2.0



4 The device will return to Set password.

<u>PASSWORD 789: DELETING OF LOAD/UNLOAD PROGRAM FROM</u> EXTERNAL FLASH MEMORY

1 From the modality Set password, select number 789 with the function keys.



2 Confirm with the ENTER key.



3 The message "Clear all recipes and unloading programs ENTER to confirm or Reset to cancel" is shown.

Press the ENTER key if you wish cancel all the datas of recipes and unloading programs. In this case the message "Deleted" appears.

Press the RESET key if you wish exit without cancel the datas.



Configuration SMART Control RevB1

4 The device will return to Set password.

<u>PASSWORD 790:</u> CLEARING OF ALL COMPONENTS AND UNLOADING POINTS

1 From the modality Set password, select number 790 with the function keys.



2 Confirm with the ENTER key.



3 The message "Clear all components and unloading points name ENTER to confirm or Reset to cancel" is shown.

Press the ENTER key if you wish cancel all the datas of components and unloading points. In this case the message "Memory Deleted" appears.

Press the RESET key if you wish exit without cancel the datas.



4 The device will return to Set password.

PASSWORD 791: LOADING OF THE NAMES FOR DEFAULT COMPONENTS AND UNLOADING POINTS

1 From the modality Set password, select number 791 with the function keys.



2 Confirm with the ENTER key.



3 The message "Set default components and unloading points name ENTER to confirm or Reset to cancel?" is shown.

Press the ENTER key if you wish loading the DEFAULT NAMES of components and unloading points:

- Component 1
- Component 2, etc.
- Unload. Point 1
- Unload. Point 2, etc.

Press the RESET key if you wish exit without to load the default names.



4 The device will return to Set password.

PASSWORD 880: HOW TO BLOCK THE WEIGHT

(Default: DG)

- 1 From set password mode, set the number 880 with the function buttons.
- 2 Confirm with the ENTER button.



3 Select the function of the BLOCK button with the PLUS and MINUS button.



- a) Select DG to set the BLOCK function during an execution or in TOTAL WEIGHT
 - mode. It's possible to exit the block function pressing the button leaves. In this case, the weight displayed will be the same displayed at the moment of the block without considering eventual changes happened during the block mode.
- b) Set M1 to activate the BLOCK function ONLY during an execution (and not in TOTAL WEIGHT).

It's possible to exit the block mode ONLY pressing the button (in this case the weight displayed will be the same displayed before the block without considering eventual changes happened during the block mode).

When the device returns in TOTAL WEIGHT, i twill show the weight considering eventual changes happened during the blocking mode).

PASSWORD 1357: CARD FORMATTING

- 1 From set password mode, set the number 1357 with the function button.
- 2 Confirm with ENTER button.
- 3 If the card is connected, the message displayed is "FORMAT CARD?".

Press the ENTER button to delete all the data in the card.

The message displayed is "Formatting.." and then "Card Formatted".

- 4 Press the RESET button to go back without deleting the data. In this case, the message displayed "DT Ignored".
- 5 The device returns in set password mode.

PAIRING: ASSOCIATION TO THE SMART BOX



Before making the pairing procedure, it's necessary to enter the password 700 on the SMART Control, select the communication mode "By cable" and restart both devices. If the password 700 is set as "RF" it's not possible to enter the pairing menu.

1 Turn on the SMART Control device pressing the ON/OFF key on the right side.



- 2 Make sure that the devices are connected through cable.
- 3 Press the CONFIG key (F11).



4 Press the "Pairing" key (F6) in order to associated the SMART Control to the SMART Box, then press the ENTER key.



5 After the message "Please wait", press the ENTER key in order to start the association.



6 It appears the message of association completed and the serial number of the device.

Restart the device after this operation.



Configuration SMART Control RevB1

GENERAL SETTINGS

1 Turn on the SMART Control device pressing the ON/OFF key on the right side.



2 Press the CONFIG key (F11).



3 Press "General Settings" (F6) in order to set date/time or the contrast.



SET DATE AND TIME

4 Press the F2 key in order to set date and time.



5 Press the function keys in order to select the day, the month and the current years. Press the ENTER key in order to save the data.



SET THE CONTRAST

6 Press the F3 key in order to set contrast.



7 Press the F2 or F8 keys in order to select the value.

Press the ENTER key in order to confirm or RESET key to exit.



Configuration SMART Control RevB1

EMERGENCY BUTTON FUNCTIONING TEST

1 It is suggested to verify every time the device is turned on, the functioning of the emergency button

Press the button F5 to test the emergency button

- a) Functioning of the STOP button: control that the press and release of the button works properly.
- If pressing the STOP button, the message displayed is "Emergency button Test OK", it means that the button works properly.



 If the button does not work properly, the emergency message is displayed.







 At the end the message displayed is "Rearm the emergency button".

b) Functioning of the sensor and of the support holder: check the sensor that confirms if the device is correctly positioned in the holder.

It is displayed a message that asks to remove the SMART Control from the holder and then putting it back in.



The test has to be performed within 30 seconds from when each message is displayed otherwise the sensor is considered damaged.

If the sensor does not work, the test is not finished properly and it is possible:

- 1. Press to work without activating the hydraulic part.
- 2. Press to switch the device off and repeat the test or repair the damaged part in safety.







Configuration SMART Control RevB1

c) Functioning of the power cable: it controls that the connection and disconnection of the cable is properly detected by the device.



Il test has to be performed within 30 seconds from when each message is displayed otherwise the cable is considered damaged.

If the cable is not detected, the test is not properly finished and it is possible:

- 1. Press to work without activating the hydraulic part.
- 2. Press to switch the device off and repeat the test or repair the damaged part in safety.







As a result of a failure of the emergency button or in the event the safety devices do not pass the test, it is possible to continue to work using only the weighing part (it is not possible instead to work with SMART Control H version);

The hydraulic functions can only be used after the repair of the emergency button and the positive outcome of the safety devices test.

USE OF SMART CONTROL

WEIGHING MODE (W and WH VERSION)

This mode is composed of 2 configuration parts. It is possible switch from a page to

other using the directional keys





The symbol in the upper left defined the page visualized.

LIST OF FUNCTION KEYS ON THE FIRST PAGE:

1 Press the TOTAL key (F3) in order to visualize the total weight.



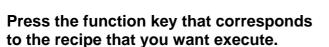
2 Press the ZERO key (F4) for 3 seconds in order to set the tare.



Press the BLOCK key (F5) in order to 3 block the weighing.



Press the RECIPE key (F6) in order to 4 enter in the modality of Select Recipe.







Use SMART Control RevB1

EXECUTION OF THE RECIPE

a) Once you have selected the recipe, the execution phase starts.



 Press F6 if you want to modify the animals number and write the value using the function keys.
 Otherwise, press the ENTER key in order to load the first component.



c)



Repeat the operation pressing ENTER for all the components until the message TOTAL LOADED appears.



d) Once all the components are loaded, the Executing Timer will start. It will go on for the time that you have set in editing phase of the recipe.

Example: when you have created the recipe (see the paragraph EDITING OF RECIPES, step "e"), you have set a timer. This value corresponds to the Executing Timer that appear in this step.



- e) At the end of the timer the device advise you with an acoustic alarm.
- 5 Press the PARTIAL key (F9) in order to visualize the partial key.

PARTIAL

6 Press the ALARM key (F10) in order to set the alarm threshold.

((i))

7 Press the CONFIG key (F11) in order to associate the device (see paragraph of CONFIGURATION MENU).



8 Press the UNLOAD key (F12) in order to enter in the modality of selection of Unload Program.

Press the function key that corresponds to the program that you want execute.



EXECUTION OF THE UNLOAD PROGRAM

a) Once you have selected the unloading program, the execution phase starts.



b) Press F4 if you want to modify the Weight To Unload and write the value using the function keys.

Otherwise, press the ENTER key in order to unload the first component.



Use SMART Control RevB1

c)



Repeat the operation for all the components until the message TOTAL UNLOADED appears.



LIST OF FUNCTION KEYS ON THE SECOND PAGE:

1 Press the COMPON. key (F3) in order to enter in the edit mode of components.

Press the function key that corresponds to the component that you want edit.





PROGRAMMATION OF THE COMPONENTS

- a) Use the directional and function keys in order to write the name of the component:
 - Press F1 in order to move the cursor to the left on the editing field.
 - Press F5 in order to choose the type of letter: capital letter, lower case letter, number or sign.
 - Press F6 in order to save the name.
 - Press F7 in order to move the cursor to the right on the editing field.
 - Press F11 in order to delete a letter/number.
 - Press F12 in order to move at the end of the name.
 - Press UP, DOWN, LEFT and RIGHT in order to choice the character/number on the keyboard and press ENTER to select it.

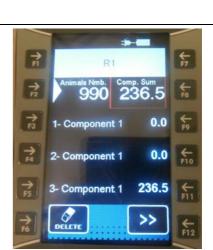


2 Press the RECIPE key (F4) in order to enter in the edit mode of recipe and press the function key that correspond to the recipe that you want edit.



PROGRAMMATION OF THE RECIPES

- a) Press F1 in order to write the name of recipe:
 - Press F5 in order to choose the type of letter: capital letter, lower case letter, number or sign.
 - Press F6 in order to save the name.
 - Press F7 in order to move the cursor to the right on the editing field.
 - Press F11 in order to delete a letter/number.
 - Press F12 in order to move at the end of the name.
 - Press UP, DOWN, LEFT and RIGHT in order to choice the character/number on the keyboard and press ENTER to select it.
 - Press F1 in order to move the cursor to the left on the editing field.
- b) Press F2 if you want modify the animals number.



c) Press F3/F4/F5 in order to select the components that you want insert in the recipe.

Press F9/F10/F11 in order to set the weight of the component.





Use SMART Control RevB1

d) Select the components from the list.



e) Press F6 if you want delete the Recipe.



f) Press F12 in order to switch to Total Programmed and press F5 in order to set mix time.



g) Press F6 and the ENTER key in order to save the recipe.



3 Press the ACC. REC. key (F5) in order to visualize the components accumulation.



a) Press F6 if you want delete all the accumulations.



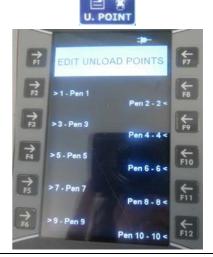
b) Press ENTER key in order to confirm or RESET to cancel.



4 Press the WORKS key (F6) in order to visualize the working hours of the devices.



5 Press the U. POINT key (F9) in order to enter in the edit mode of unloading point and press the function key that correspond to the unloading point that you want edit.



Use SMART Control RevB1

PROGRAMMATION OF THE UNLOADING POINTS

- a) Use the directional and function keys in order to write the name of the unloading point:
 - Press F1 in order to move the cursor to the left on the editing field.
 - Press F5 in order to choose the type of letter: capital letter, lower case letter, number or sign.
 - Press F6 in order to save the name.
 - Press F7 in order to move the cursor to the right on the editing field.
 - Press F11 in order to delete a letter/number.
 - Press F12 in order to move at the end of the name.
 - Press UP, DOWN, LEFT and RIGHT in order to choice the character/number on the keyboard and press ENTER to select it.
- 6 Press the UNLOAD key (F10) in order to enter in the edit mode of unloading program.



PROGRAMMATION OF THE UNLOADING PROGRAM

 a) Press the function key that corresponds to the unloading program that you want execute and the Total Programmed appears.



- b) Press F1 in order to write the name of unloading program:
 - Press F1 in order to move the cursor to the left on the editing field.
 - Press F5 in order to choose the type of letter: capital letter, lower case letter, number or sign.
 - Press F6 in order to save the name.
 - Press F7 in order to move the cursor to the right on the editing field.
 - Press F11 in order to delete a letter/number.
 - Press F12 in order to move at the end of the name.
 - Press UP, DOWN, LEFT and RIGHT in order to choice the character/number on the keyboard and press ENTER to select it.
- EDIT U PROGRAM

 ABCDEFGH

 I JK LM N O P O

 R ST U V W X Y Z

 A A A A A A A C C E

 E E E II I I I D N

 O O O O O X O U U

 F4 U U Y P B A A A C

 ABCD

 ABCD

 ABCD

c) Press the functions keys in order to select the unloading points.



d) Press F6 if you want delete the unloading program.



Use SMART Control RevB1

e) Press F12 and the ENTER key in order to save the unloading program.



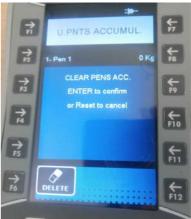
7 Press the ACC. UNL. key (F11) in order to visualize the unloading points accumulation.



a) Press F6 if you want delete all the accumulations.



b) Press ENTER key in order to confirm or RESET to cancel.



8 Press the DIAGN. key (F12) in order to check all the hardware working of device (display, combo, keyboard)





Press the RESET key in each moment in order to return back in TOTAL WEIGHT.

LACK OF / RESTORE THE COMMUNICATION

1 Se lo SMART Control non comunica con lo SMART Box appare il messaggio in foto.



Press the RESET key in order to program also if the communication with the SMART Box is absent.

When the communication appears to be available, press the key ENTER to restore it.





WEIGHING MODE AND HYDRAULIC COMMAND

This mode manage 2 sections:

- The 4 upper keys concern the weighing mode (see WEIGHING MODE paragraph).
- The 4 bottom keys concern the hydraulic mode that is variable in function of the type of machine and it is available only on the W-H version (please see the specific manual).
- Press the and keys in order to change page.





Use SMART Control RevB1

HYDRAULIC MODE (AVALAIBLE IN H AND WH VERSIONS)

This mode is variable in function of the type of machine (please see the specific manual).

Press the key relatives to the functions that you want active.

Depending on how the system has been set up, the functions can be activated in the following ways:

- 1- Holding down the button for driving the movement that you want to execute.
- 2- Pressing once the button that controls the operation; to stop this function, press the same button again.

The LED next to the button indicates the status of the valve:

- LED off the function is not active.
- Green LED the function is active.
- Red LED function error (valve disconnected or shorted).





USE OF SMART BOX H AND WH

- 1 Connect the SMART Control with the SMART Box.
- 2 Turn on the SMART Box powering it or releasing the red key (turn it clockwise).
- 3 Disconnect the power supply or press the stop key in order to turn off the SMART Box.
- 4 Press the F1 key for about 3 seconds (with Smart Control off or not communicating) to visualize the total weight on the weight repeater or, subsequently, to set the tare.

TROUBLESHOOTING

OUT OF RANGE

DISPLAY

Radio Communication not available. Power SmartBox ON if OFF / go in the coverage range / verify the Pairing or press Reset to continue without Output Controls.

CAUSE

The weight value is red and the message appears if the device goes out of RF working range or the communication is absent.

SOLUTION

- 1. Bring the SMART Control near to the SMART Box
- 2. Check the presence of PtoP receiver and which is not damaged (SMART Box W-H)
- Check the presence of antenna and which is not damaged (SMART Box W).
- 4. Turn on the SMART Box
- Press the RESET key only if you want to program the device (see the next point)
- 6. Check that SMART
 Control is associated to
 SMART Box



The weight value is red and the message appears if the cable is disconnected or damaged.

- 1. Turn on the SMART Box
- 2. Press the RESET key only for programming the device (see the next point)
- 3. Check if SMART Control is associated to SMART Box
- 4. Replace the communication cable
- 5. Check if the communication cable is connected



The weight value is red because the device is out of action range or it does not communicate with the SMART Box.

If you press the RESET

key, the icon appears that indicates the possibility of using the device in programmation mode.

- 1. Bring the SMART Control near to the SMART Box
- 2. Check the presence of PtoP receiver and which is not damaged (SMART Box W-H)
- 3. Check the presence of antenna and which is not damaged (SMART Box W)
- 4. Turn on the SMART Box

Service SMART Control RevB1



It means that the hydraulic valves are not active

The weight value is white because the device is in the range of communicates with SMART Box.

When the sign appears, it means that the communication has been interrupted and before activating a valve you need to press the button ENTER.

- 1. Put the SMART Control close to the SMART Box
- 2. Check that the PtoP receiver is there and is not damaged (SMART Box WH)
- 3. Check the presence of the antenna and that it's not damaged (SMART Box W)
- 4. Turn on the SMART Box

COMMUNICATION ABSENT

DISPLAY



CAUSE

- 1. The communication cable is damaged
- 2. The SMART Box is turned off or damaged

SOLUTION

- 1. Substitute the cable.
- 2. Check the functioning of SMART Box
- 3. Restart the SMART Box and repeat the association



- 1. The SMART Box is turned off or damaged
- 2. The xbee modem is damaged
- 1. Check the functioning of SMART Box
- Connect the communication cable, press RESET and enter in the password menu in order to change the communication mode (see PASSWORD 700: CHOICE OF COMMUNICATION MODE) and restart the device.
- 3. Connect the xbee modem, press RESET and enter in the password menu in order to change the communication mode (see PASSWORD 700: CHOICE OF COMMUNICATION MODE) and restart the device



- 1. SMART Box is turned off or damaged
- 2. The communication cable is damaged
- 1. Check the functioning of **SMART Box**
- 2. Connect the communication cable, press RESET and enter in the password menu in order to change the communication mode (see PASSWORD 700: **CHOICE OF COMMUNICATION** MODE) and restart the device.
- 3. Connect the xbee modem, press RESET and enter in the password menu in order to change the communication mode (see PASSWORD 700: **CHOICE OF COMMUNICATION** MODE) and restart the device

LOW BATTERY

DISPLAY

CAUSE

When the power of the **SmartBox system is** lower than 8V, the message reported to the side with the red triangle will appear.

The blocking message will remain active until the power supply will not assume values greater than 8V.

SOLUTION

Make sure that the battery is sufficiently charged in order to use the system correctly.

If this condition occurs, both the message and the red triangle will be automatically removed.



Total Weight 61 All valves off Connect power cable

The message appears if the level of battery is low

Connect the device to power supply

Service SMART Control RevB1

POWER SUPPLY (visualization of the icon in the upper right)









Plug and battery

to the power cable and the battery is NOT fully charged

Plug and green battery

When the device is connected to the power cable and the battery is totally charged

When the device is connected

Only the plug

When the device is connected to the power cable and the battery is fully charged

Only the battery

When the device is not connected to the power cable. The battery shows its level of charge.

Low battery does not allow the functioning of hydraulic part

EMERGENCY

DISPLAY CAUSE SOLUTION



The message appears when you press the STOP key (available only on W-H version).

Release the STOP key, turn off and restart the device SMART Box W-H.

SAFETY CHECKS

DISPLAY



CAUSE

The device does not function in case of handling the hydraulic parts:

- 1. The device is not correctly inserted into the support bracket
- 2. The device is damaged
- 3. The bracket is damaged
- 4. The communication / power supply cable is not connected
- 5. The cable is damaged

SOLUTION

- 1. Insert the device into the bracket
- 2. Replace or repair the device
- 3. Replace the bracket
- 4. Connect the communication / power supply cable
- 5. Replace the cable



- 1. If the key does not function, the emergency message appears
- 1. Repeat the test and, if the outcome is still negative, replace and repair the device

HYDRAULIC FUNCTIONS ARE NOT ACTIVATED

DISPLAY

Hydraulic Disabled Turn off the device and repeat safety test

CAUSE SOL

The device does not function in case of handling the hydraulic parts:

- 1. The device has not passed the initial test concerning the safety of the bracket or of the power/communication cable
- 2. The device is damaged
- 3. The bracket is damaged
- 4. The cable is damaged

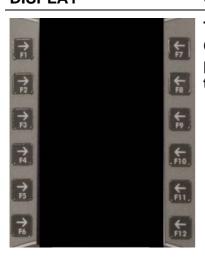
SOLUTION

SOLUTION

- 1. Replace or repair the device.
- 2. Replace the bracket
- 3. Replace the cable

THE DEVICE DOES NOT TURN ON

DISPLAY



CAUSE

The screen of SMART Control is black also if you press the ON/OFF key for turn on it. Stop immediately the use of device and contact the assistance in order to fix the issue.

Service SMART Control RevB1

CHECK OF THE VALVES FUNCTIONING

Valve number	SMART Control Led Status			
	Working valve	Disconnected valve	Valvola in corto	
1	Green	Red	Red	
2	Green	Red	Red	
3	Green	Red	Red	
4	Green	Red	Red	
5	Green	Red	Red	
6	Green	Red	Red	
7	Green	Red	Red	
8	Green	Red	Red	
9	Green	Red	Red	
10	Green	Red	Red	
11	Green	Green	Red	
12	Green	Green	Red	
13	Green	Red	Red	
14	Green	Red	Red	
15	Green	Red	Red	
16	Green	Red	Red	
17	Green	Red	Red	
18	Green	Red	Red	
19	Green	Red	Red	
20	Green	Red	Red	
21	Green	Red	Red	
22	Green	Red	Red	
23	Green	Green	Red	
24	Green	Green	Red	

Rules SMART Control RevB1

DICHIARAZIONE DI CONFORMITA' UE - EU DECLARATION OF CONFORMITY - EU KONFORMITÄTSERKLÄRUNG - DÉCLARATION UE DE CONFORMITÉ - DECLARACION UE DE CONFORMIDAD - EU ДЕКЛАРАЦИЯ О СООТВЕТСТВИИ

Nr 03/16

- Il sottoscritto, designato a legale rappresentante della Dinamica Generale s.p.a., via Mondadori 15. Poggio Rusco (MN) - Italy, dichiara che i prodotti sottoelencati:
- **EN** The undersigned, an authorised officer of Dinamica Generale s.p.a., via Mondadori 15, Poggio Rusco (MN) - Italy, hereby declares that the products listed hereunder:
- Der Unterzeichner, rechtlicher Vertreter der Dinamica Generale s.p.a., via Mondadori 15, Poggio Rusco (MN) – Italy, erklärt, daß die nachstehend beschriebenen Produkte:
- FR Je soussigné, représentant légal désigné de Dinamica Generale s.p.a., via Mondadori 15, Poggio Rusco (MN) - Italy, déclare que les produits énumérés ci-après:
- ES El suscrito, nombrado representante legal de la Dinamica Generale s.p.a., via Mondadori 15, Poggio Rusco (MN) - Italy, declara que los productos indicatos a continuación:
- RU Нижеподписавшийся, являющийся законным представителем компании Dinamica Generale s.p.a., расположенной по адресу via Mondadori 15, Poggio Rusco (MN) – Italy, заявляет, что продукция ниже

Kit Smart Control

- IT Sono conformi a quanto prescritto dalle seguenti direttive:
- ΕN Are in compliance with the following directives:
- Mit den Vorschriften konform sind, die in den folgenden Richtlinien: D
- FR Sont conformes aux prescriptions des directives suivantes:
- ES Respetan las prescripciones contenidas en las siguientes directivas:
- RU Соответствует требованиям следующих директив:
- IT E dalle seguenti norme:
- And with the following standards: ΕN
- D Und Normen stehen:
- FR Et aux normes ci-apres:
- ES Y en las siguientes normas:
- И следующих стандартов:

EN ISO 14982 (2009-02) Agricultural and forestry machinery -- Electromagnetic compatibility - Test methods

and acceptance criteria

- IT E, in applicazione a quanto previsto dalle direttive citate, sono stati dotati di marcatura CE ed é stato predisposto un adeguato fascicolo tecnico presso la ns. sede.
- And, pursuant of the above-mentioned directives, the CE mark has been applied. Furthermore, adequate technical file has been prepared and is available from our offices.
- D Und daß sie in Übereinstimmung mit den Vorschriften der obengenannten Richtlinien mit dem CE-Zeichen versehen sind und daß dafür ein angemessenes technisches Heft erstellt wurde, das bei uns in der Firma zur Verfügung steht.
- FR En application des directives citées, ils portent la marque CE et un dossier technique est deposé auprès de notre siège.
- Y, conforme con lo previsto en las citadas directivas, han recibido la marca CE. Existe asimismo un especifico prospecto técnico ES relativo disponible en nuestra sede.
- И, в исполнении данных директив, был нанесен знак СЕ и соответствующее техническое досье было заведено в нашем офисе.

Poggio Rusco, 18/04/2016

Indrea GHIRALDI

2014/30/EU

Rules SMART Control RevB1

WARNING: NOTES FOR A CORRECT USE



The SMART Box W-H is provided with a fuse on the inside to protect from the polarity inversion of power.

If the SMART Box has been powered with inverse polarity it is necessary to replace the fuse. REPLACE THE FUSE ONLY WITH A SUITABLE ONE AND WITH SAME CHARACTERISTICS.

Always check specifications indicated on the fuse.

DG declines every responsibility in case of not suitable fuse



Inside the box, no operations are allowed.

During maintenance or any kind of operation to the system IT IS NECESSARY to take off the power from the whole system.

DG declines every responsibility in case of tampering or modification of the power cable.

DG declines every responsibility in case of tampering or of modification on the system.



During maintenance or any type of operations made on the system, IT IS NECESSARY to switch off the main power supply of the whole system.



Before operating any welding onto the mixing wagon IT IS NECESSARY: Take off battery power cable.

Take off all cables of the electro valves from the SMART Box W-H.

Take off the communication cable from the SMART Box.

After completing maintenance operations, check if hydraulic controls are working. During the test, keep at safety distance.

DG declines every responsibility in case of not preservation of these instructions.



For safety reasons we hardly recommend the use of electrical valves without electrical connection with SMART Box W-H.



The 2 positive power supply wires (Blue or Gray and Black) MUST be always connected TOGHETER to the positive of the battery.

The 2 negative power supply wires (Brown and Yellow-Green) MUST be always connected TOGHETER to the negative of the battery. Do not supply the device with a direct connection on the alternator; such a wrong connection could damage the system.



If the device SMART Box W-H for some reason is blocked, the first thing to do is pushing the STOP button and release it after few seconds. If the system is not provided with the STOP button, disconnect the power supply from the battery. If the system is still blocked, please contact the service department.



The SMART CONTROL SYSTEM is not a safety system.

It is a general purpose system that can fit on several kind of machines. Is the machine's manufacturer that must take care on safety features of the machine. DG declines every responsibility in case of damages to objects or persons.



The machine's manufacturer on which the Smart Control has been installed takes on the responsibility of guaranteeing the suitability of the power source to the requirements of the rule EN 60204-1, in order to assure safety and the correct functionality.



The symbols on the buttons on the Smart Control are chosen together with the customer.

For this reason it's his own responsibility to check the congruence of his choices according to what is established by the rule EN 60204-1.



The connectable SMART Box W-H hydraulic devices must have the following characteristics:

Maximum absorption current: 5 A

Operative rate: 12Vdc

Absolute maximum rate: 15Vdc.



The machine manufacturer on which the Smart Control has been installed takes on the responsibility of settling the Smart Control parts in order to avoid any possibility of contact between the user's positions and the dangerous hydraulic devices eventually used.

When the user presses a button, the same is supposed to be informed of the corresponding movement of the machine.

dinamica generale®, in this regard, provides the User manual to explain the Smart Control functionalities.



This marking on the product or on its packaging illustrates that this product may not be disposed of with normal household waste.

You are responsible for disposal of this equipment in a correct way and in according to local regulations.



Rules SMART Control RevB1



When you have finished working, DG suggests to put the hand-held control in the right positions.



Before cleaning the machine with water under high pressure, protect the equipment from likely penetration of water. In addition, take care not to keep the hand-held control, the SMART Box, cables or any options to direct water.



If the equipment needs to be cleaned, use a soft, damp, lint-free cloth. Never use sprays, solvents, abrasives, sharp or pointed objects that could damage the device.



It is not possible to use 2 SMART Controls connected to only one SMART Box (even if one of the 2 is connected through a cable).



It is not possible to use 2 complete kits (SMART Box + SMART Control) in the same work area.

GUARANTEE

The supplier guarantees, for 24 months from the delivery date, the good quality of the materials used, the excellent construction and the steady functioning of the instrument that has been manufactured and that bears the trademark or the production serial number. During the guarantee period the supplier undertakes to repair or replace, free supplier's head office, faulty parts due to poor materials or faulty construction, provided that such parts are delivered free port supplier's head office.

Shortcomings and defects due to the incorrect use of instruments, inadequate maintenance, changes carried out without the supplier's approval and normal wear are not included in this guarantee. Liability and compensations by the supplier due to direct or indirect damages to persons, objects or production, even as a consequence of faulty functioning of the supplied instruments or of material or construction defects, are not included in this guarantee.

NOTE:		

dinamica generale® has the faculty to modify the content of this user's manual due to hardware and software implementations in order to improve the products and therefore guarantee the best service to their users.

Rules SMART Control RevB1

Congratulations Dear User!

You have chosen a dinamica generale® product, a leading company in the development and production of electronic weighing systems, automation systems and NIR solutions. These systems bring a high technological level in every field of application such as zoo technical, feeding, industrial and biomedical. Year by year the international market recognizes the quality, experience, reliability and most of all the innovative technology, as a part of a highly developed and innovative know how. These are the pillars of our work and according to these beliefs we are at your service, providing you with a simple as well as new, precise and professional product, which is going to make your job easier for many years. This user's manual intends to take you through the different performances of the weighing system in the easiest way possible and to show you some new functions as well. dinamica generale® did not forget to provide you with even the most basic information: the configuration, the use of different accessories at your disposal, the service of "searching for faults" and the equipment's safety rules, in order to guarantee to our customers more and more support and technical assistance for years to come.

Now there is nothing left for us to do but wish you a work well done!

The dinamica generale® team



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CUSTOMER SERVICE sales@dinamicagenerale.com support@dinamicagenerale.com

ASSISTANCE



Technical assistance 24 hours a day, 365 days a year.

QUALITY & CERTIFICATIONS

For dinamica generale, sustainability means integrating long term economic, environmental and social dimensions into the way we operate our business according to the:



ISO 14001:2004





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