

STAGEMAKER



OWNER'S MANUAL

**RADIO LOAD CELL SYSTEM DEDICATED TO
ENTERTAINMENT INDUSTRY**



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Introduction:

The Stagemaker radio load cell system is a wireless safety load monitoring control system with multi-frequency channels and multiple load cells that is very user-friendly and easy to operate and control. Being wireless, the system provides the user with easy installation during rehearsals and when erecting the structure while eliminating the burden of carrying, placing, installing and dismantling the large number of heavy cables that would otherwise be required for only a few hanging points per system. Having the ability to monitor a large number of loading points on one screen simultaneously and in real time, gives the user the full and complete loading picture required to overcome the physical phenomenon called “**Static Indeterminate Structure**” and manage the safe lifting of the equipment. The core of the system is based on three decades of on-going development, know-how and experience in the industrial safe-lifting sector including eight years of experience in the entertainment industry. Using a PC, it provides the ideal solution for companies engaged in lifting complex equipment in surroundings where human life and expensive equipment are exposed to danger and where **safe lifting** must be guaranteed, such as in the entertainment industry where such heavy equipment is suspended above the performers and the audience. Our motto is therefore: **Safety Above All**.

The Stagemaker radio load cell system system has been developed to serve the increasing demand of the entertainment industry for multi-sectional load control (i.e. mother-grid or long truss with several hoists lifting the equipment), mainly to assist the operator in handling the above-mentioned equipment used in such operations, by controlling the safety of all the equipment through a single control unit (PC).

The Stagemaker radio load cell system system is safe, sophisticated and user-friendly. It allows the user to operate and control a group of more than 100 load cells per system and more than one **system per site** as one unit and up to 15 independent groups. The operator, in **real-time and simultaneously** controls the load of the suspended equipment at all the loading points during lifting (**Dynamic Load**) and after it is set in place (**Static Load**). The system receives, controls and monitors the load, detecting and indicating Overload, Underload and Danger, allowing activities such as Zero, Tare, Sum & Max results, allow a selectable Measurement units, Resolution and Battery indication for each load cell or any of the predetermined groups. In addition, a stage plan (drawing files such : Jpg, Jpeg, Bmp & PDF) can be used for locating the load cells at the load points when setting the system for each show and stored in the report folder in the PC, including all the relevant settings of the event.

The user can **set and monitor the overload** detection value (customized overload - up to the load cell capacity – used for locations where the permitted load for the loading point is less than the hoist's capacity). The user can assign a name for each loading point or predetermined group and easily change the group members as required, as well as the **groups overload** and the **total structure overload**. All this information can be used to stop the hoist(s) or the entire structure using the StageMaster set point device, which via dry contact output to any hoist controller can define the limits (overload or underload) during stage erecting.

The system allows the user to **collect the data gathered** during the system's operation, including collection of the Weight, Max, Danger and Overload situations and the Total Cumulative Weight for each group. **The data collected is saved on the PC's hard disk for as long as the user wishes.** The report is saved as an HTML file and can easily be transferred to Excel of Microsoft Office for any sorting or other statistical analysis as required (useful for finding the cause of failures/accidents). The report can be operated/halted easily by clicking a button.

Please read the manual carefully – It will facilitate the installation and subsequent use of the system.

1**System Requirements**

For Stagemaker radio load cell system optimal performance, the following are the **minimum** system requirements:

PC or Laptop equipped with min. 256k cache, CD-ROM, USB 2.0 port, HD 40GB *,

Windows (98 / Me / 2000 / XP/VISTA/Win7/Win8***/Mac with Win emulator).

Screen with resolution of 1024/768 **

* For using the REPORT feature (saving the data collected). The size of the HD will determine how much data (history) can be stored.

** For optimal graphic display (full screen).

*** In VISTA/Win7/Win8 – After installation and before using the system for the first time, the user must remove the check mark from the “Use User Account Control (UAC) to help protect your computer” option, located in “ Turn user account On or Off ” under “User account” under “control panel” under “Start”>

(Start/Control panel/User account/Turn..) For illustrated procedure please see screen shots in pages 22-23.

Definitions

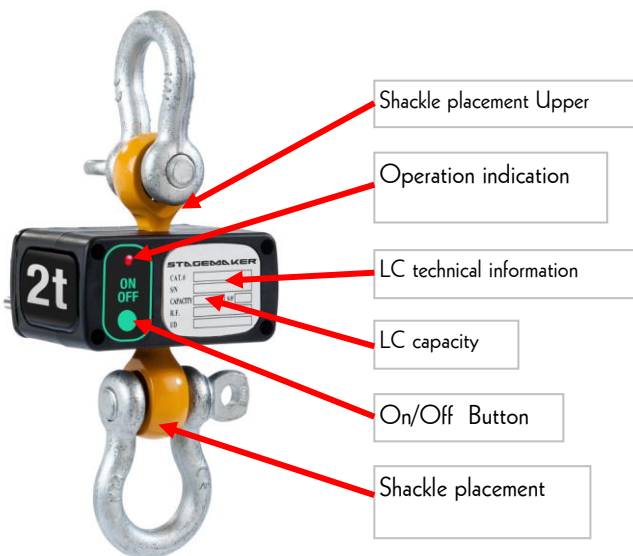
Hardware, Software & options

Hardware

SRLM or SRLI – Load Cell – The dynamometer sensor. This unit is located between the loading point and the suspended load/equipment. It measures the load applied and transmits the results to the CRR.

Front

Back



CRR - Central Radio Receiver – Located next to the PC, it receives the transmissions from the load cells and transfers the data to the control unit (PC) using the USB 2.0 connection.



Set Point Connection (Blue)

Data Reception Indication (Blue)

PC Connection (Green)

On/Off Button (Yellow) And indication (Green)

Power Connection (Red), Illuminates when power cord is connected to the mains.

CENTRAL RADIO RECEIVER CONNECTIONS

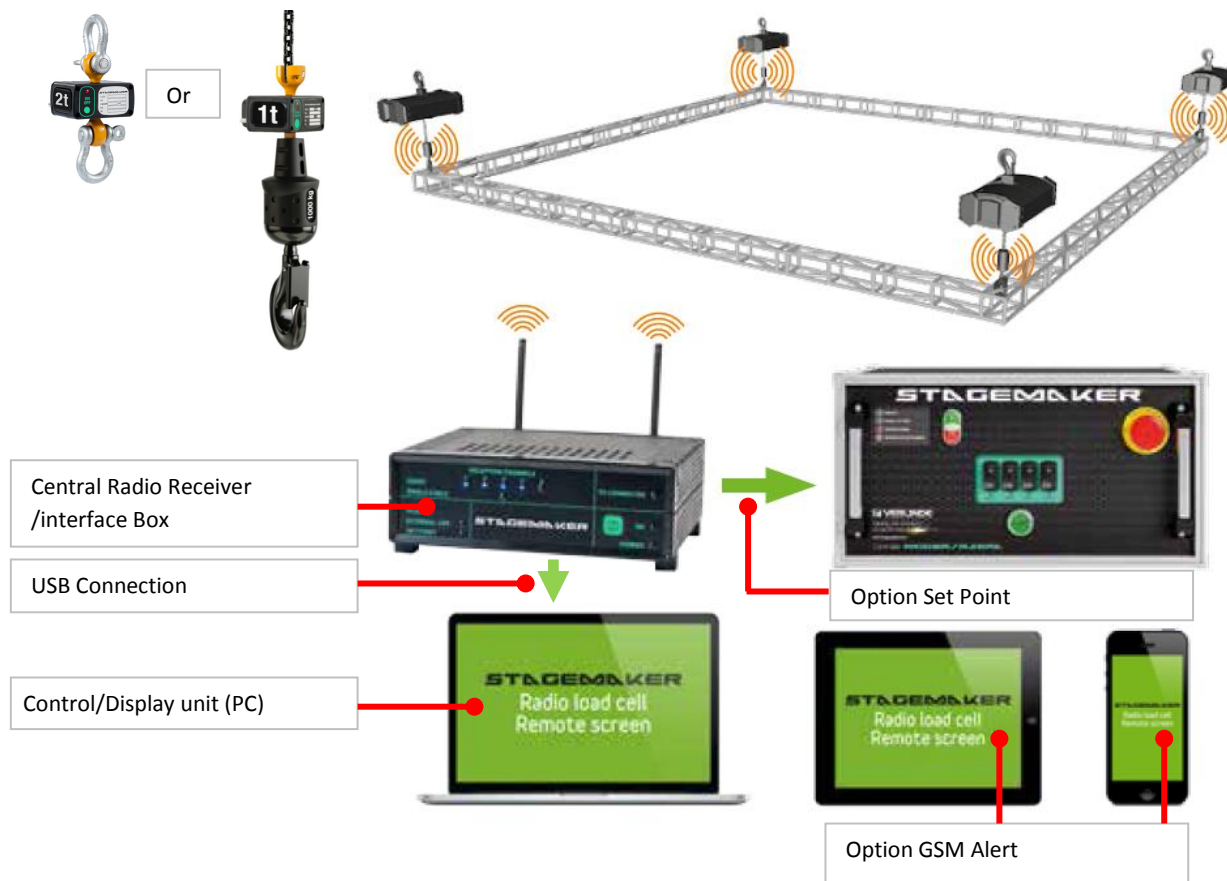
Power Supply – to the mains
85-240V -5Vcc.

USB 2.0 Connection to the
PC

Option : Set point



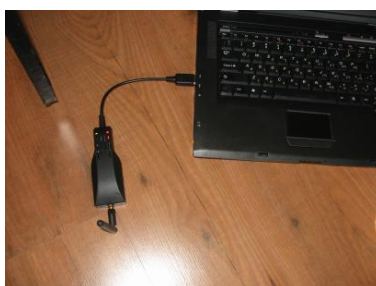
CONTROL UNIT – This is essentially a PC or a laptop, which controls the data received from the CENTRAL RADIO RECEIVER, then processes and displays them on the PC or laptop screen and saves the information on the HD.



POWER SUPPLY – The power supply unit's working range is between 85V and 240V from the mains. It is connected to the Central Radio Receiver box using a unique connector.



SMS Alert –This OPTIONAL feature is a remote control unit for the senior operative in charge. Used to inform the responsible person of any change/problematic status in the system installed when he absent from the installation site (pages 15-16). **Until formal update – this application does not operate in Vista OS.**



Set Point - This OPTIONAL feature allows the user to set and control the motors used (stop the motor/s in case of a hazardous situation). It can be applied with any kind of motor controller using a relay with dry contact and a basic status of Normally Open or Normally Closed, per user requirement (page 21).

**** The Alarm in the photo below is only for the demonstration – it may vary from one system to the other.**



Connection socket to the controller and/or alarm/siren

Software Definitions & alerts

Overload – Any load applied to the LC that exceeds the max. permissible load limitation set (LC capacity or lower if required/set - Customized Overload). The overload may be on a single loading point, group of loading points (group) or the total structure accumulated loading value. Each of these overloads will alert the user on the screen in real time and in the report (Also additional alert features as an SMS alert or Set point to stop the motor or activate any kind of alarm – if the option is added to the system).

Underload – Any load applied to the LC that decreases the min. permissible load limitation set - if required/set (Customized Underload). The Underload may be customized only on a single loading point. Each of these Underloads will alert the user on the screen in real time and in the report (Also additional alert features as an SMS alert or Set point to stop the motor or activate any kind of alarm – if the option is added to the system). Can be used to indicate and recover motor-chain slack during work.

Danger - Any load applied to the LC, which exceeds the max. permissible load set (LC capacity or lower if required - Customized Overload) by 33% or more. The Overload/Danger can be at a single loading point, group of loading points or the Total accumulated loading value. Each of these overloads will alert the user on the screen in real time and in the report (Also additional alert features as an SMS alert or Set point to stop the motor or activate any kind of alarm – if the option is added to the system).

Tr. Error – The transmission did not properly receive or no transmission received from the LC at all.

Sum – This is the sum of a LC's group accumulated load values - each group has its own sum. Can be use to indicate the load of few loading points on one structure (long truss or a beam) that has load limitations. The Sum takes into account the Tare function. The group is also the basis for activating Zero or Tare activities and can be limited with the load applied from the group LC's accumulated values. To identify the LC's that belong to a specific group – double click on the sum and the LC's that set to be part of that group on the screen – its frame will change the color to blue.

Max – This is the maximum value received (LC Max) or calculated (Group Max) during a system run period. The color of the LC's readout will change to purple. Can be use to identify weak points in a structure/design before the real show, pointing the pick values. The Max figure will reset after closing the s/w or clicking "Apply" following any change in Settings.

Total – This is the accumulated number of the all-participating LC's in the system that is a member in the total group (roof/ceiling group). Can be use to check and alert the limitations of any roof/ceiling loaded, such warning (shows only danger) needs a prompt remedy. It will not take into account the Tare function (NET - if active) and will not display a figure if one of the LC's is in Tr. Error status, the total number can show more than the actual total load in case of double lair loading – (if adding to that group a LC that is in a lower group).

Zero – After prolonged use or different temperature condition, the adjustment of a LC can divert from its original status and a minor value may appear (in + or -) although no load is currently being applied on the LC. To eliminate it, there is an option to Zero the LC in accordance with the CRR. To do so, the user should click with the mouse on the group total of the LC that needs to be zeroed (left top) then, to secure this actions, the user need to press simultaneously on CTRL+SHIFT+F12, doing that will illuminate the ZERO button. Please note- all the LC's in the group will zero – that is required to create a common zero to LC's in the group.

Tare – That feature is used to ignore any non-required load for calculation/display (i.e. motors & chains). Please note, to keep safe, the structure Total load value (roof) will not take into consideration the reduced value of TARE. Activating Tare (group based), the "Gross" status located on top of the Group Sum will turn to "Net" status. To reverse to gross, there is a need to click again on the Tare button.

Low Bat – The LOW BAT alert shows up when LC batteries power is about (depends on the battery quality) 30 working hours remaining (2%). Click on Battery button to view the LC's battery power status. Battery life span may vary in different temperature conditions.

We strongly recommend that all batteries be replaced before any new show's installation – for safety, also, to operate at total power shutdown, it is recommended to use a UPS device for the CRR.

P.S.W. – Pre Set Weight – This is the extra weight the user wish to add to the loading point that represents the load that is not measured due to the position of the load in relation to the LC (above the LC – i.e. Hoist). This value can be set in the ID settings screen and will be reset up on any ZERO applied on the LC.

List – This is an optional list display of the operating load cells in general or by group including the Max weight that will be displayed next to the current load.

Battery On/Off – This is a display of all operating and registered Load Cells battery status – it will replace display every second with the current load to allow the user a constant connection with the loads.

Report – This is the data logged to the PC hard drive, located in the Stage Master folder under Projects. It will break and open a new report every 1 Mb of memory, titled by group name, date and time that the report started.

2 INSTALLATION

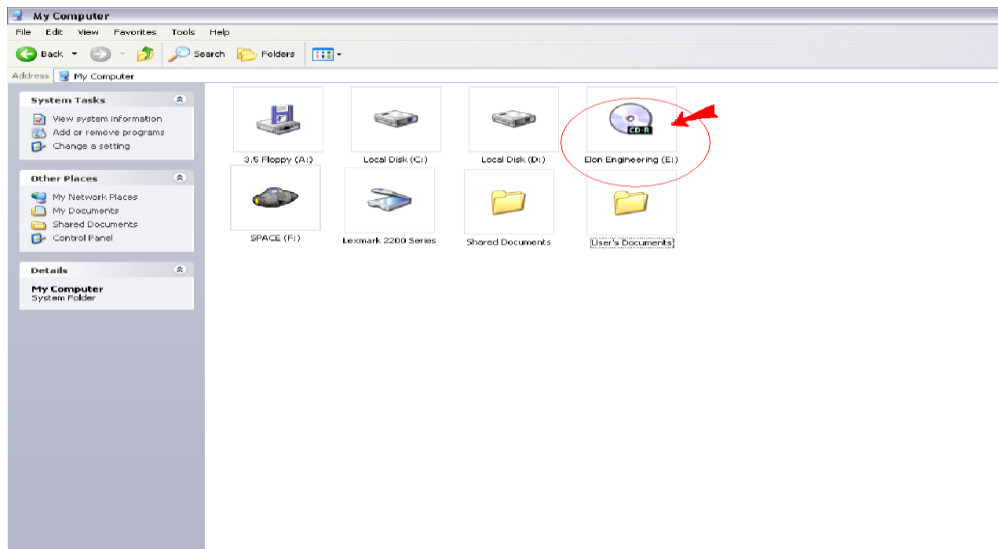
Installation layout and purpose:

Be sure to read carefully and follow **ALL** the steps in the installation process.

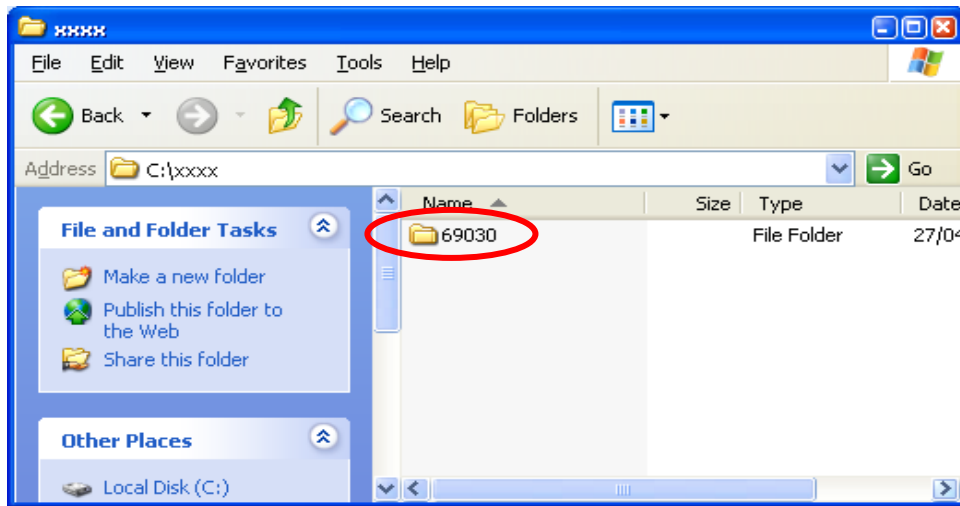
Step	Subject	Purpose
1	System Installation	This is the Lab VIEW (® by National Instruments Corp.) platform that processes and displays the information received by the CRR via the USB on a PC.
2	Stagemaker load cell program running	Activating the Stagemaker load cell program after installation.

1. Installation of the Stagemaker load cell Program

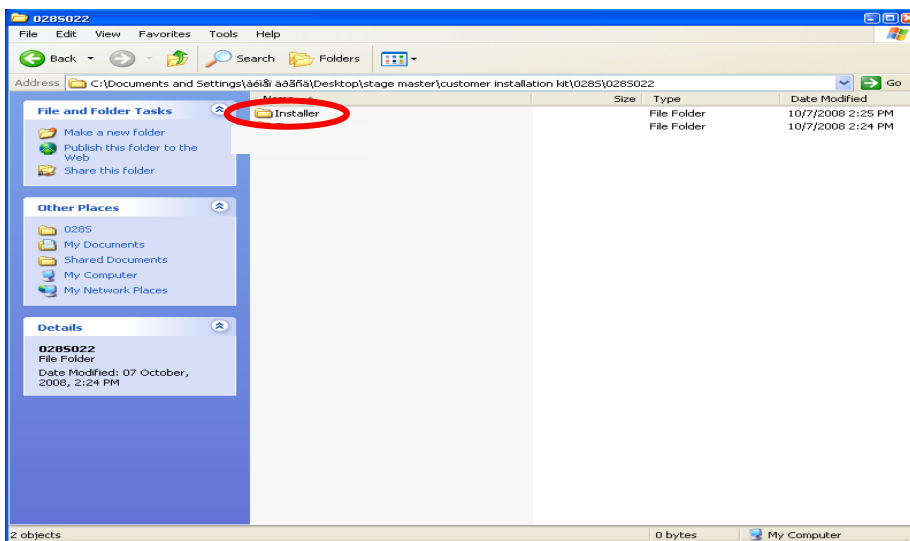
- 1.1. Insert the provided original installation CD into the CD-ROM Drive.
- 1.2. Open "My Computer" (double click on the icon in the desktop or by opening "Start" and then "My computer"). Click on the **CD-ROM Drive** Icon (usually contains the system's serial number) recommended to Copy the folder from disc to the C Hard Disk (as back up copy).



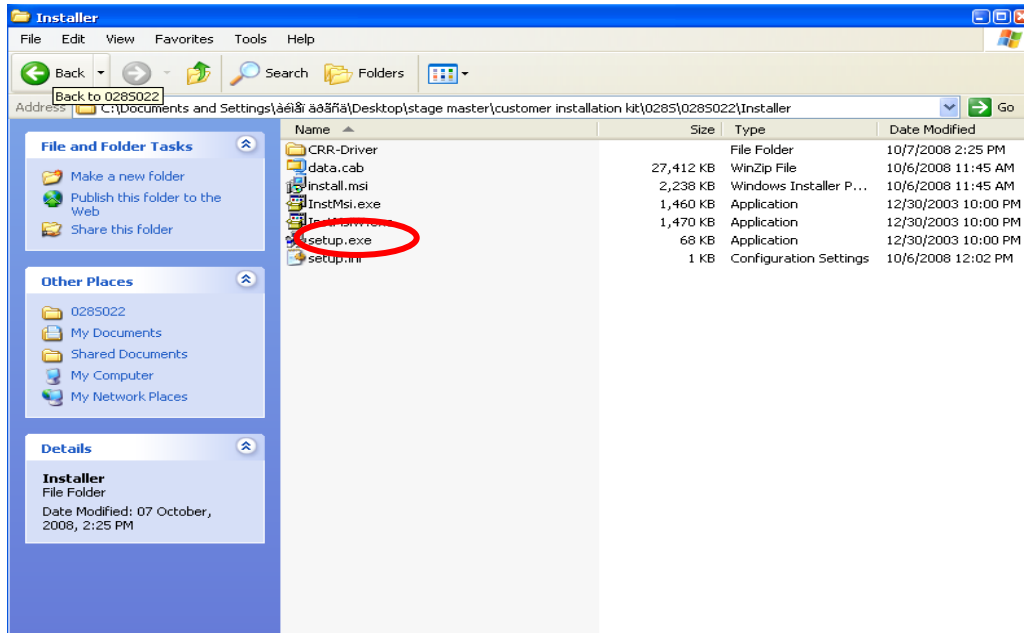
- 1.3. Open the folder (the folder name is the system serial number) by double clicking on the icon.



1.4. Open the "INSTALLER" folder by double clicking on it.



1.5. Double Click on "SETUP.EXE" icon (or "Volume" first if comes before – depend on version) and follow the installation wizard steps by clicking on the "NEXT" button until the FINISH final stage. It is required to select the "program file" (default selection) to be the folder hosting the software as well as the location to activate the StageMaster.exe (possible to send shortcut to the PC Desktop as well for convenient usage).

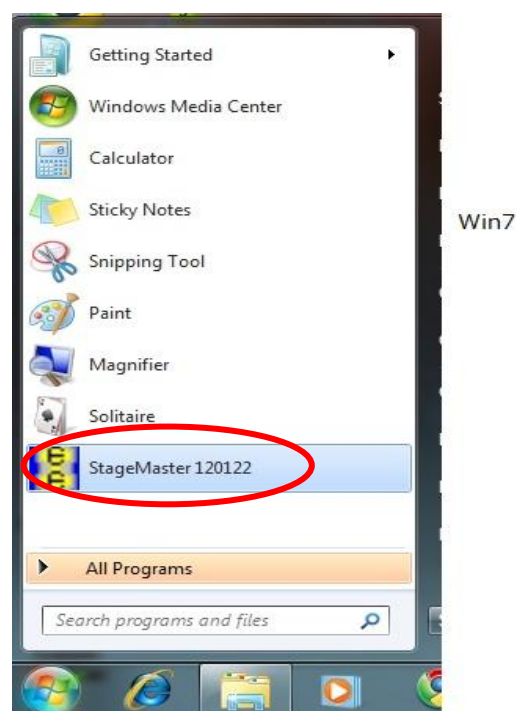
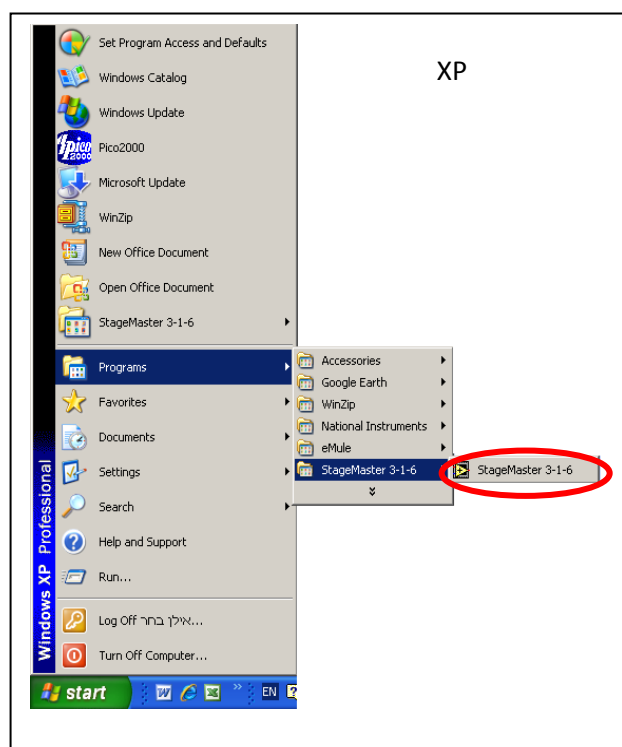


- 1.6. Following the above successful procedure - The program is installed.
- 1.7. Please change the PC SLEEP mode to NEVER (program will require a fresh running following PC hibernation/sleep).
- 1.8. If the operating system is Vista or WIN7/8 -Please follow the instructions in pages **22-23** before running the program for the 1st time in any new PC.

It is highly recommended to restart the computer after the installation process is complete (including the driver installation that appears after clicking on “Finish” button) and before running the StageMaster program for the first time.

2. Activating the Stagemaker load cell Program

- 2.1. Before placing the load cells on stage where the loads applied need to be monitored, turn ON all the load cell devices, by pressing the ON/OFF button on the LC touch panel for 1 second, making sure that the red color LED indicating "POWER" illuminates briefly. The red light should flash at 5-second intervals. Check that it lights again. If it does not flash, try to switch it ON by pressing again on the ON/OFF button. If it blinks rapidly – the batteries may be depleted and need to be replaced. Despite the system's long **battery life** and due to the large variation in the quality of batteries and their discharge behavior (including temperature changes), **we strongly recommend that all batteries be replaced before a new show's installation**. Doing so will eliminate the possibility of batteries reaching the end of their life and not functioning during the show. From a safety point of view and the importance of using the system during the entire show, the cost of new batteries is negligible.
- 2.2. Connect the CRR power supply to the mains (RED LED will illuminated) and the USB plug to the PC and Switch it ON by pressing on the "ON/OFF" button located at the front panel of the CRR. A GREEN LED will illuminate to indicate the power is ON. The BLUE lights below the "RECEPTION CHANNELS" indicate that the data from the LC received, analyzed and transmitted to the PC. The data transfer to the PC will begin to flow after running the system and matching the port (Section 2.3)
- 2.3. To activate the Stagemaker load cell programm click on START button – then Programs/StageMaster xxxxxx and select the Stage Master XXXX, as illustrated below, or at Win7 directly on the START menu. (Possible to activate the stage master via >my computer/program files/stage master xxxx).
- 2.4. Following the first usage of the system after installation/changing a USB port, please conduct a "search com" in Settings to pair the CRR USB connection with the PC program (description in pages 10-11).



Please note, to turn the system off, you should proceed as follows:

A. End the program.

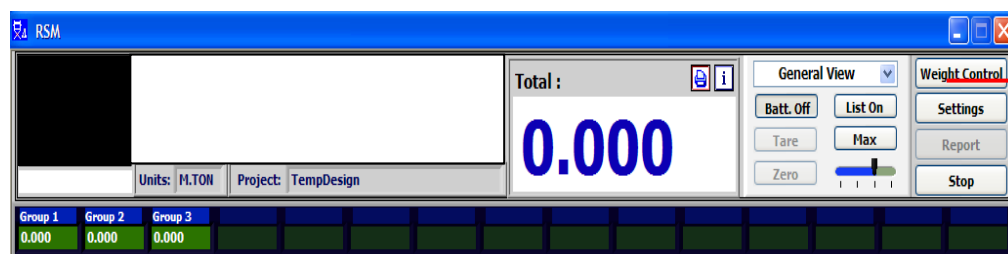
B. Turn off the CRR by pressing on the “ON/OFF” button located at the front panel of the CRR.

3. Illustrated Description of Systems' Functions

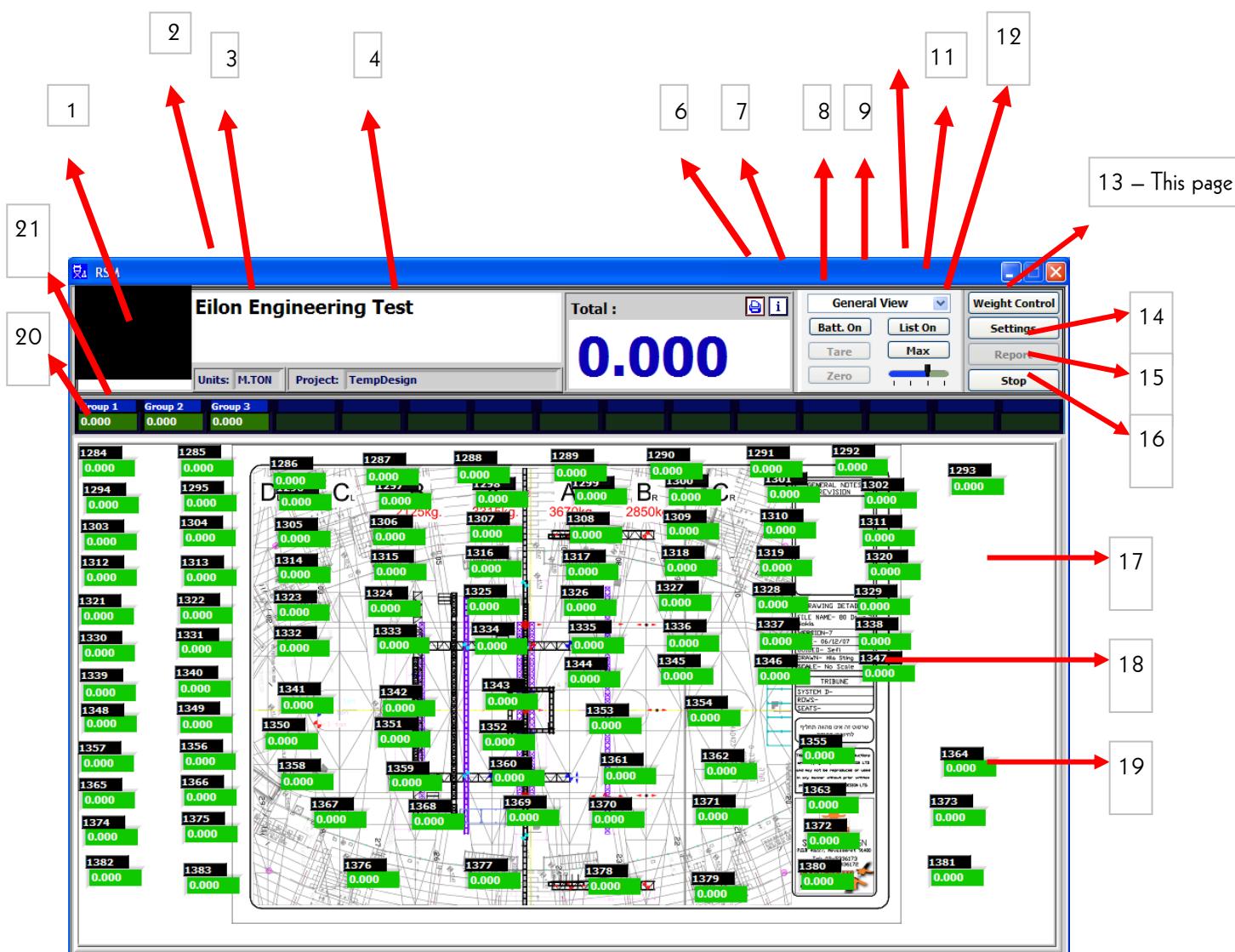
3.1. Weight control screen

13

Weight Control



Click the Weight Control Button to open the main load map screen



13 – This page

Description locations:

Sections 1-4 – page 11

Sections 5-8 – page 12

Sections 9-10+20 – page 13

Sections 11-12– page 14

Sections 14-20 – page 15

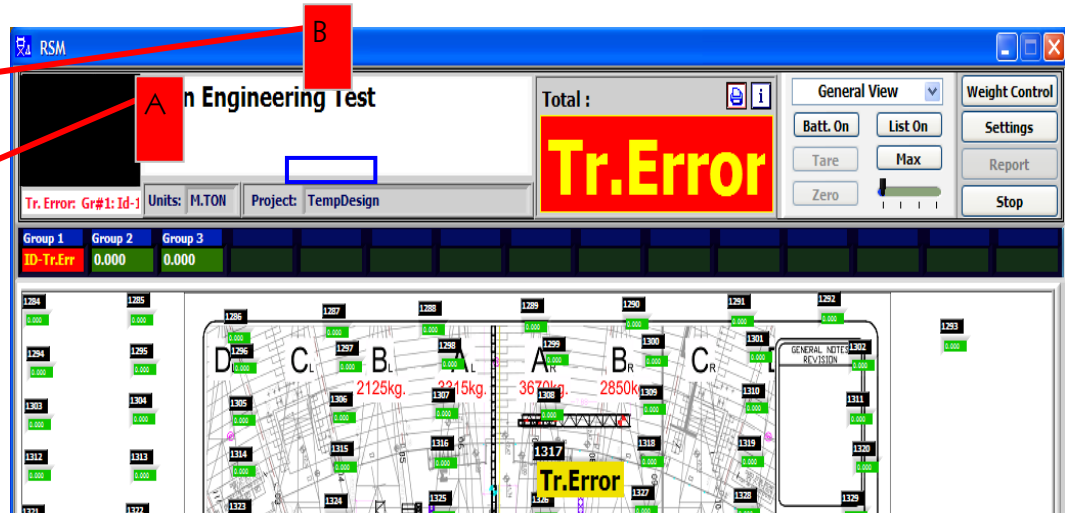
Sections 21-page 16

1

2

Message Board – Display system status for the user (Tr. Error, Danger etc.).

In case the system has a message to the user – the small window will indicate a message (A) . If you wish to read the message –locate the mouse pointer on the message and it will magnify the message (B).



3

Units – Indicates the units the loads displayed at. (To change it goes to settings/group).



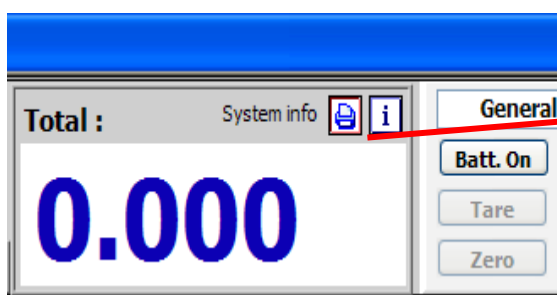
Units indication

- 4 **Project Name** – Indicates the current settings/ display project name (To change it go to settings).

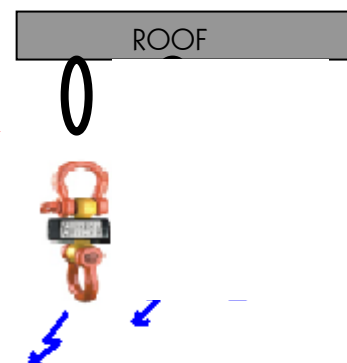


Project name indication

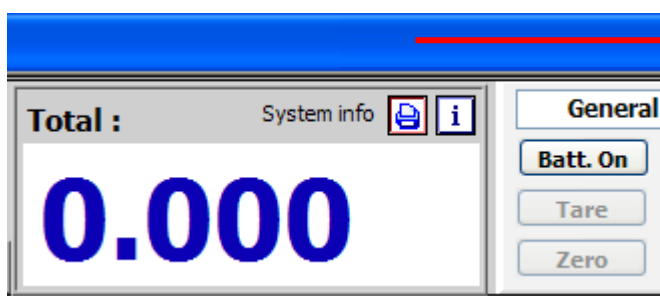
- 5 **Total -**



This is the total structure weight summing all the LC's directly joint to the roof (set to be member in the total group.)



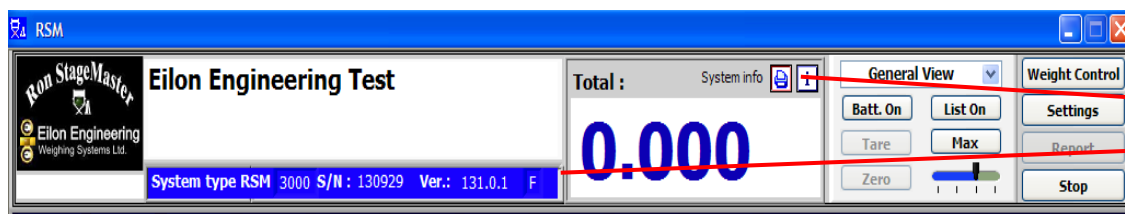
- 6 **Print Screen**



Click the Print Button to show the date & time and activate "print screen" and save that screen shot in Projects file

System Information

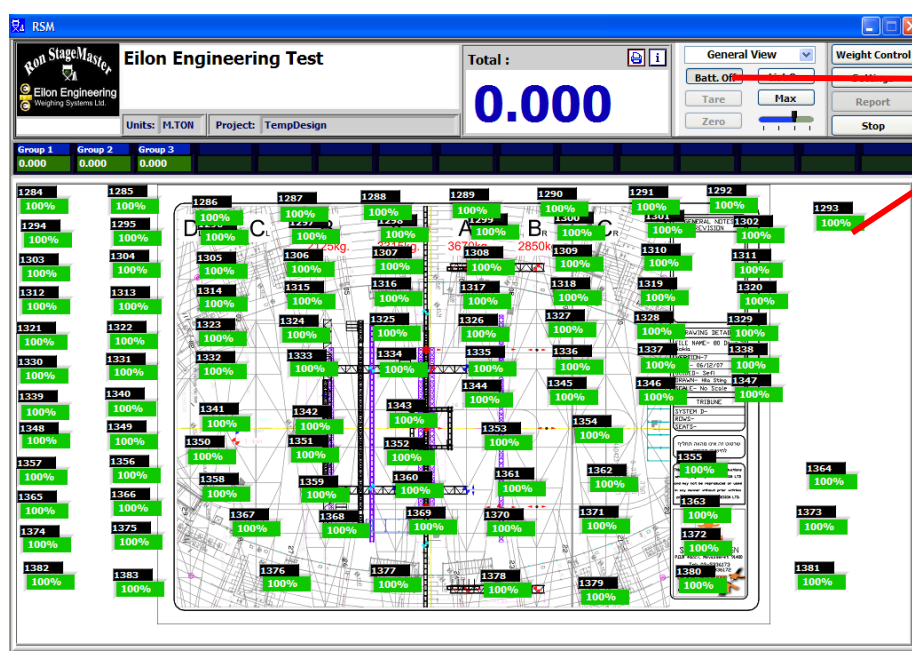
7



Clicking the “ i ” button displays the system information

Battery status

8



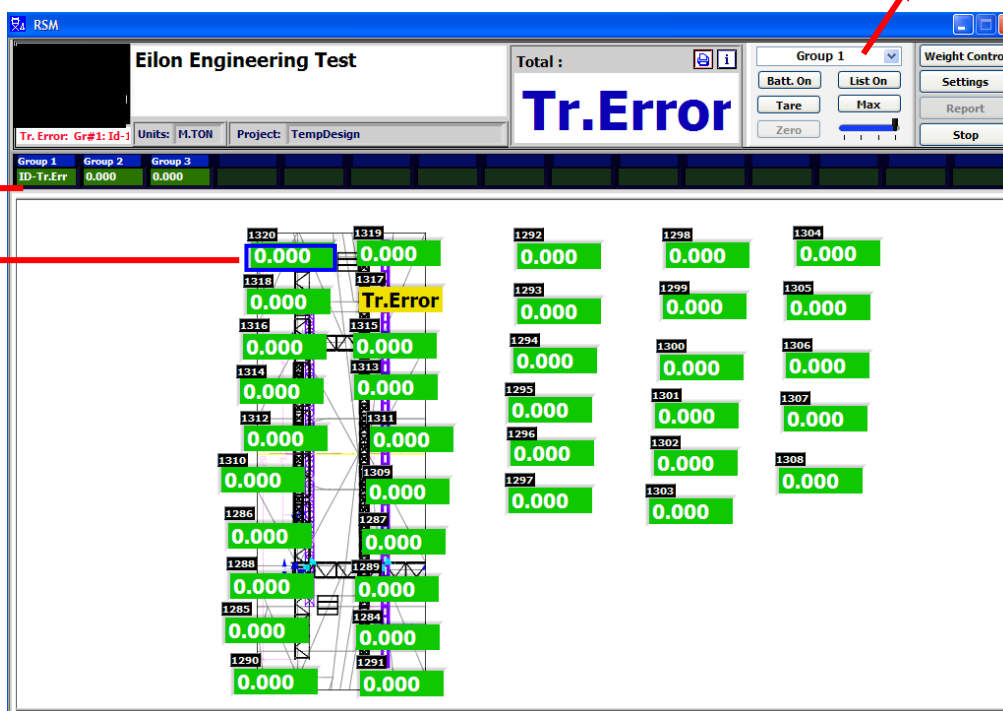
Click the Batt On Button to display the Battery status of all the LC's.

Group

9 20

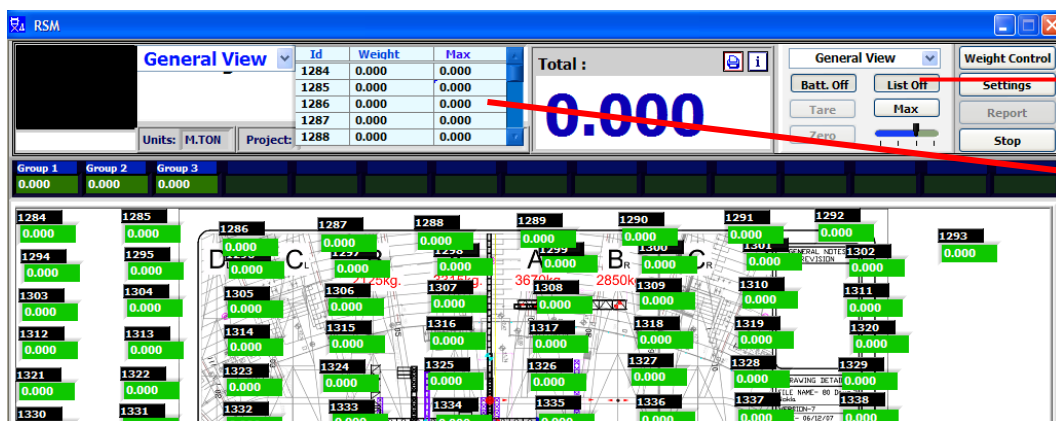
Group selection – a drill down list –

Double Click the group sum display to show the LC's in the group – a blue frame will indicate it. Also To activate the Tare Button and to be able to Zero the Groups' LC's.



List On display – LC's list display, for general or any group display – indicated the LC's current load and the Max load next to it. To close it – click again on the List Button.

10



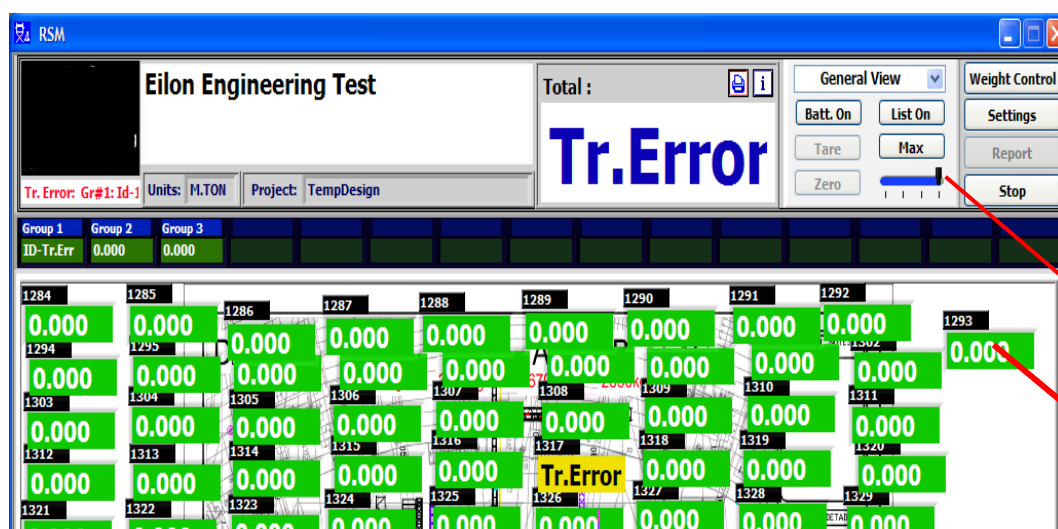
Click the List On Button to open the Lc's list display.

11 **Max & Sum** - Displays the MAX value of any of the LC's & GROUP. The Max value will reset at every setting change where the Apply button is used. To return the view to SUM values, click on the "SUM" button.

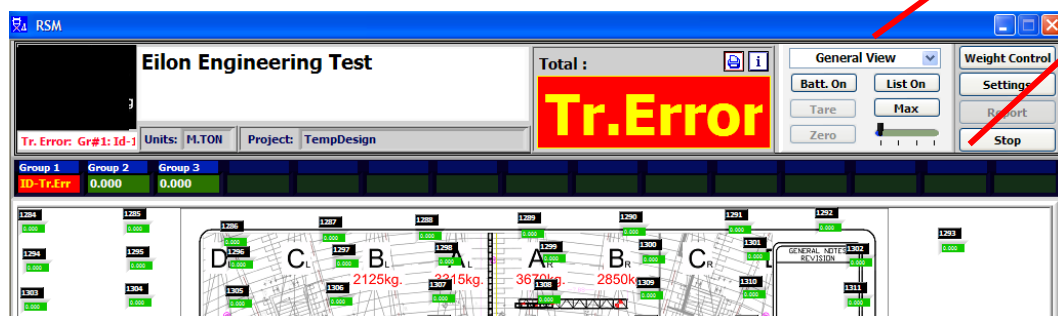
Sum - It displays the total of the group..

Click the MAX Button to display the Maximal point status of all the LC's and the groups. To return to Current display click again on the SUM button.

12 **Zoom** – In cases there are many LC's used at one system, the user can select the size of the load indication size. The Zoom Bar has 4 positions that indicate 4 different sizes – the right position is the biggest size.



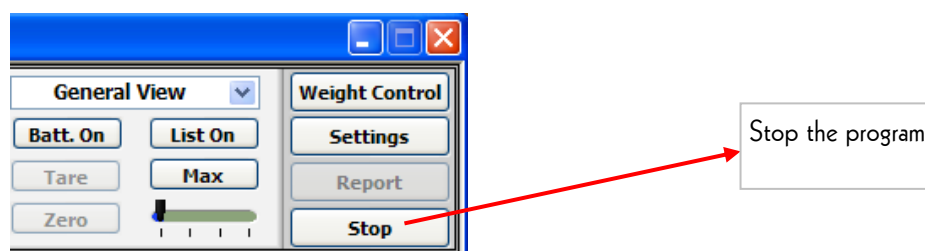
Click the Zoom Bar to enlarge or shrink the Lc's load indication size.



14 Settings - In page 17.

15 Reports - In page 30.

16 **Stop** – Clicking on that button will close the software and open the latest report.



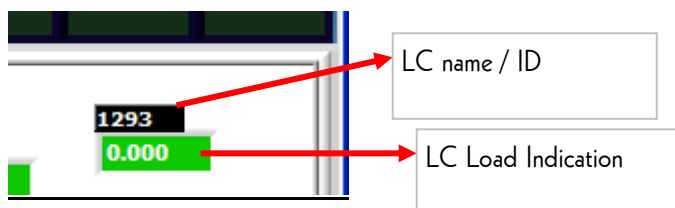
Stop the program

17

Plans – In page 21

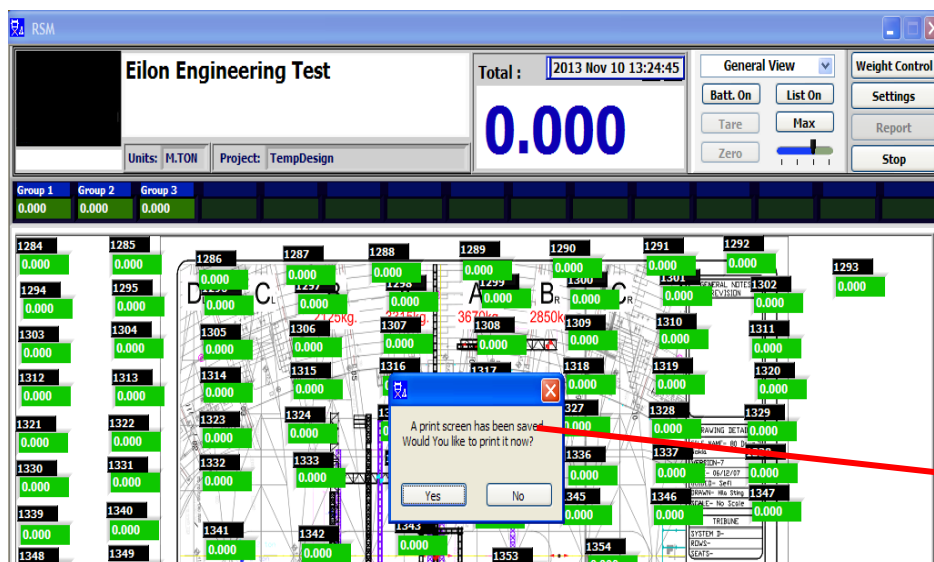
18

LC name / ID – Indicates the LC ID or set name (can be edited in settings/ID)



19

LC Load indication – Indicates the LC's load received.



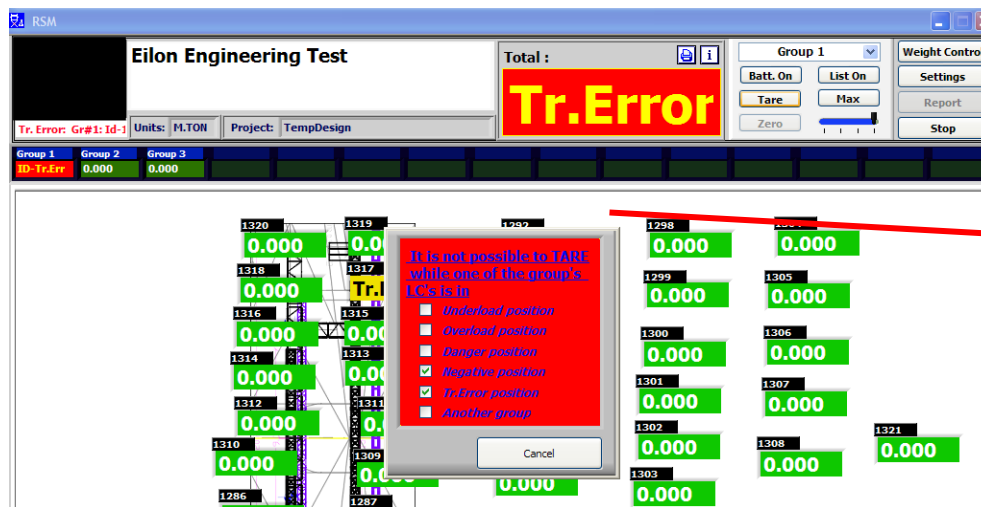
Click the Yes Button to print the screen shot – if you have a printer connected to the PC.

20

Group – in Page 13

21

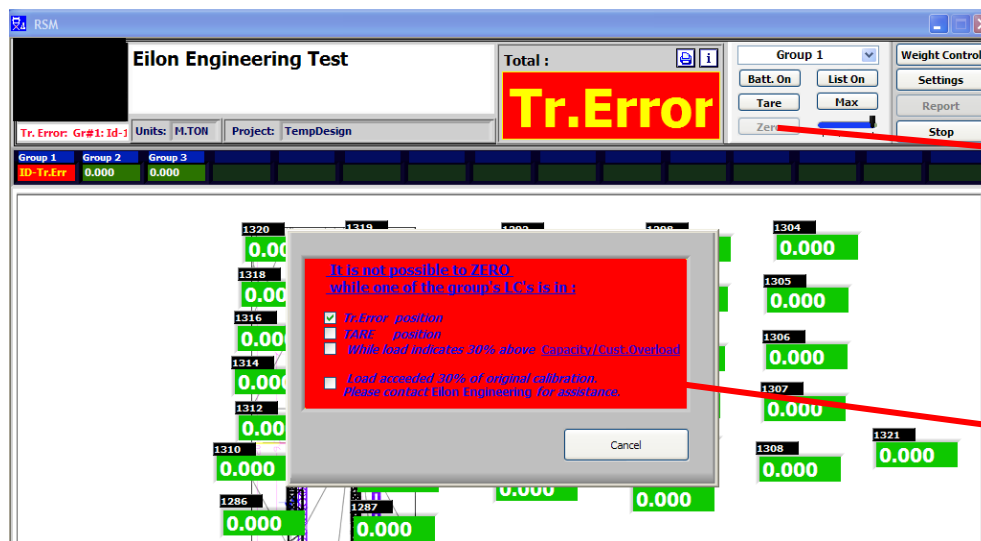
Tare - To Tare – Select the “Details” display type, then double click with the mouse pointer on a group sum of the group that you wish to Tare and then click on the Tare function key.



Click the Tare Button to display **Net** Load of a group. To return to back **Gross** Load click again on the Tare button.

There are some system conditions, that the Tare command is not accepted reasons displayed in the red table.

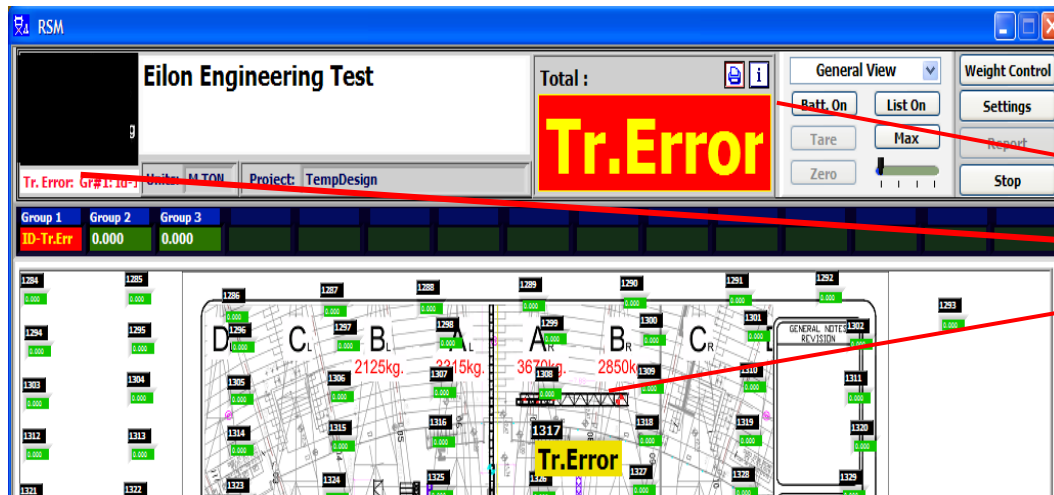
Zero - To zero –Double click on a groups' sum that you wish to zero. The Zero key is normally not activated (secured Zero). The user can activate the Zero function key by pressing the ctrl + shift +f12 keys simultaneously, then clicking on the Zero function key.



Click the Zero Button to maintain Zero on the groups' LC's. To make the Zero Button available (illuminated) click on the simultaneously on the following 3 buttons: CTRL & SHIFT &F12

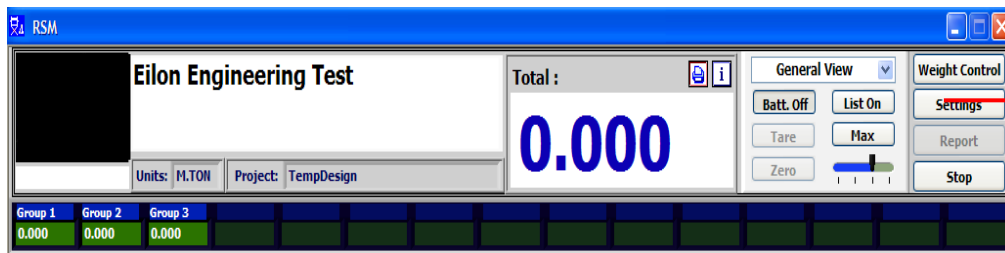
There are some system conditions, that the Zero command is not accepted reasons displayed in the red table.

Tr. Error – Miscommunication indication between the LC and the CRR.



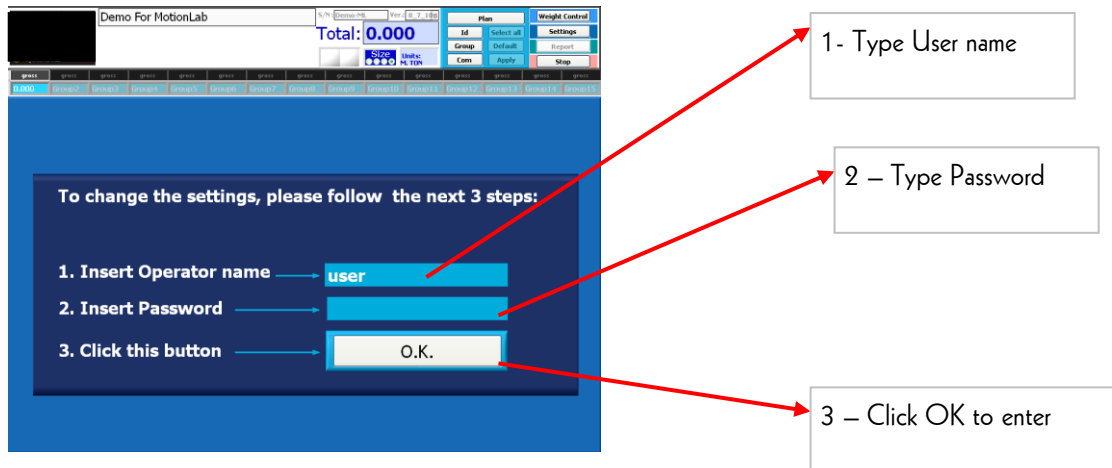
Tr. Error – For safety– any miscommunication Occurs between a LC and the CRR – a Tr. Error is indicated on the LC and there is no indication of the load applied on it - there will be no result for the group Sum for that LC and no Total load as well

3.2. 14 Settings screens

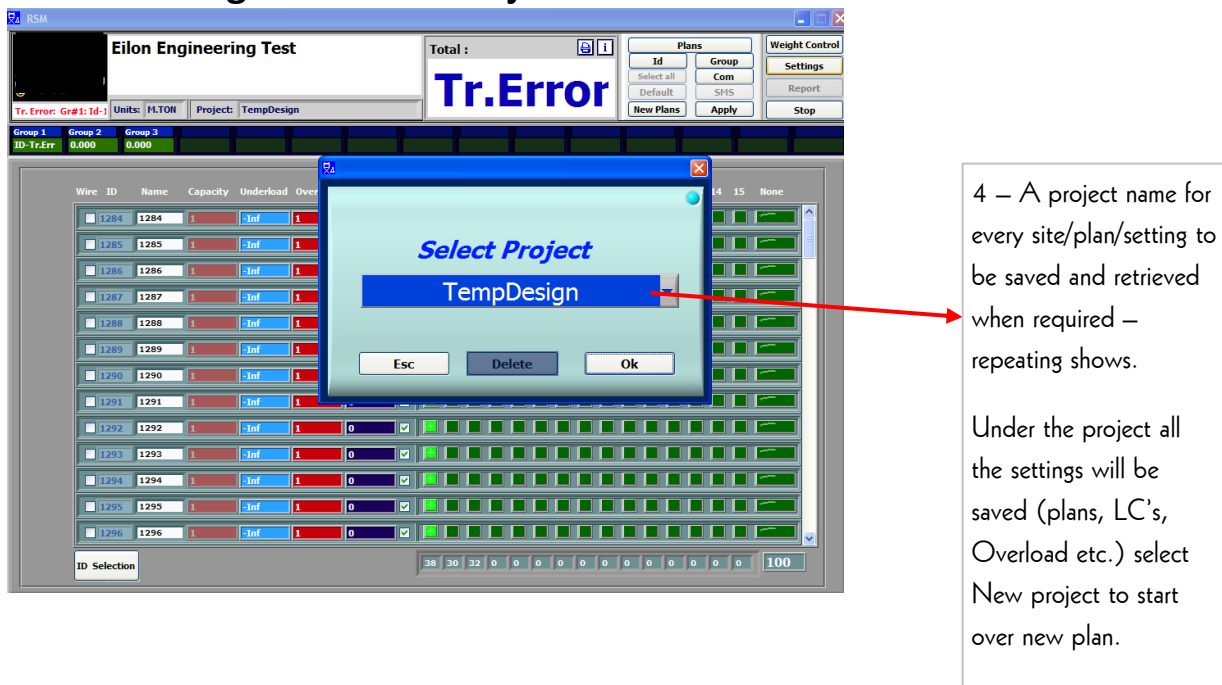


Click the Settings Button to open the settings screens

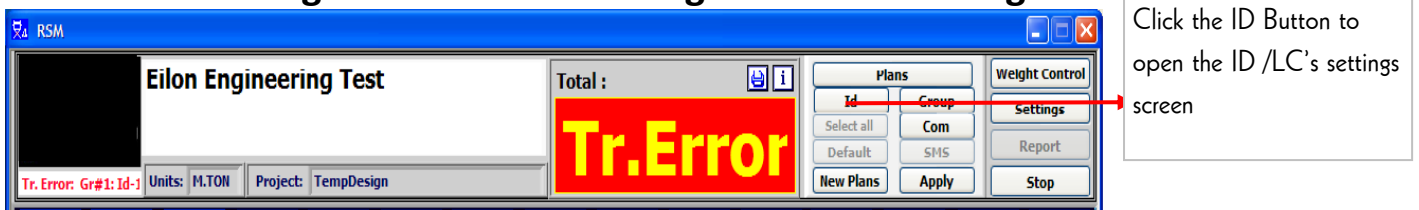
3.2.1. Settings screens – security/Login – For each project setting, the password is required. Operator name is listed in the bottom of the reports.

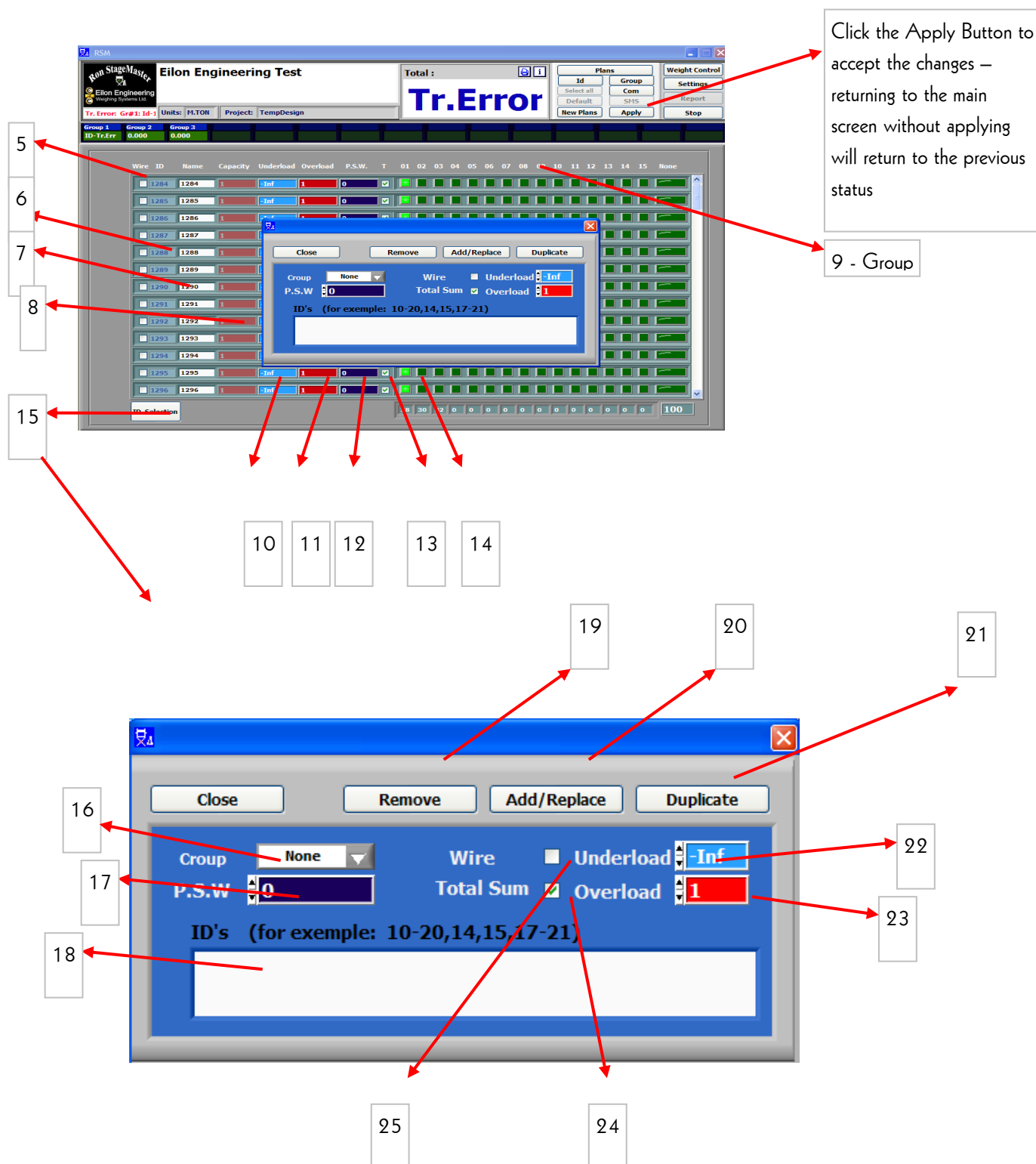


3.2.2. Settings screens – Project Name



3.2.3. Settings screens – LC's ID registration & settings





5 – Wire – Selecting if the LC is Wired or Wireless.

6 – LC ID – Indicates the LC ID unique number.

7 – LC ID/Name – Indicates the LC ID unique number or a selected name by the function.

8 – LC Capacity – Indicates the LC MFR Max Capacity.

9 – Groups – Up to 15 Groups are available for use/selection.

10 – Underload – This is the minimal point that below it the system will alert Underload.

11 – Overload – This is the maximal point that above it the system will alert Overload.

12 – P.S.W. – Pre Set Weight – This is the field to add a constant weight that needs to be taken in consideration but not measured (above the LC/Motor).

13 – T – Clicking on that field will add that LC to the Roof Group and be added to the Total weight calculation.

14 – This used to allocate the LC to the group (1-15).

15 – ID Selection – Clicking on that button will open the menu for editing LC's (add, remove Etc.).

16 – Group Selection – Clicking on that button will open a list of 15 groups to select from to assign LC's to.

17 – PSW – Field used to define what would be the Pre Set Weight for the selected LC's ID's.

18 – ID selection – Adding, Removing, Selecting Groups, OL, UL, Type (W or WL), The LC's that will be selected here will be effected by the selection of parameters.

19 – Remove – Field used to define what activity – Remove - is implemented on the selected ID's.

20 – Add/Replace – Field used to define what activity – Add/Replace - will be implemented on the selected ID's.

21 – Duplicate – Field used to define what activity – Duplicate - is implemented on the selected ID's.

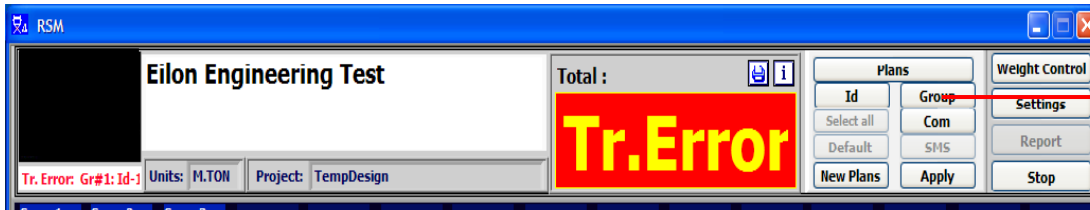
22 – Underload– Field used to define what is the minimal weight that is implemented on the selected ID's.

23 – Overload– Field used to define what is the maximal weight that is implemented on the selected ID's.

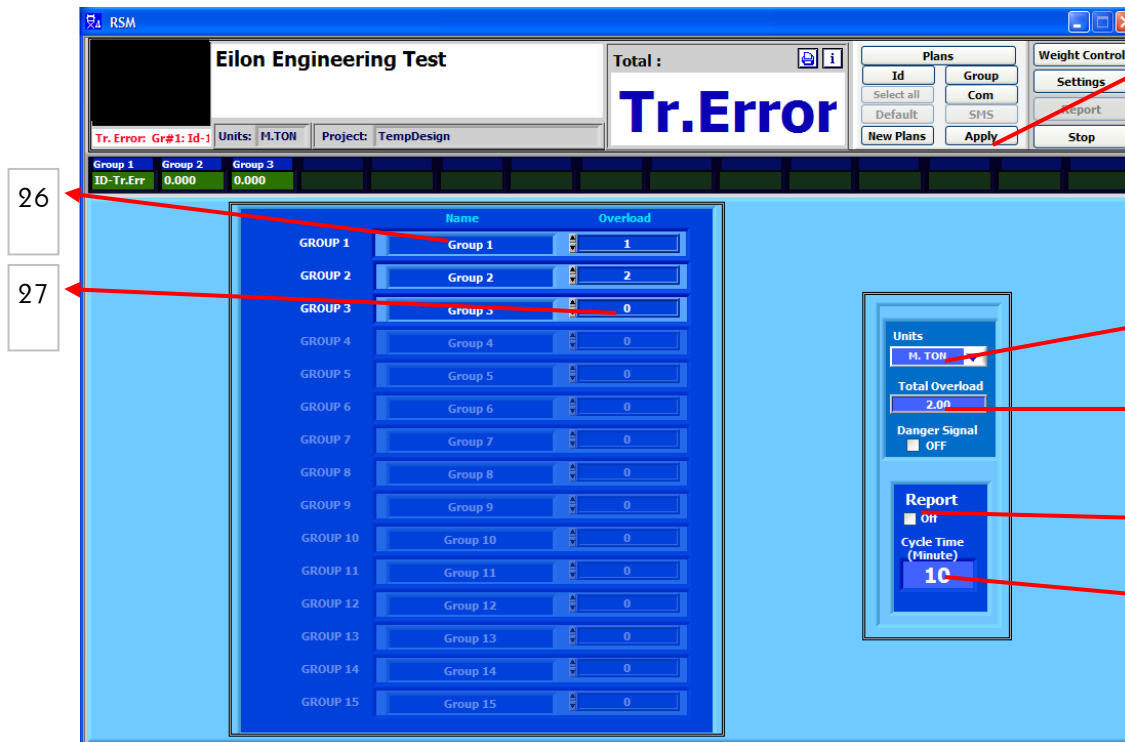
24 – Total Sum– Field used to define if the Total weight will take in consideration the selected ID's.

25 – Wire– Field used to define if the selected ID's are Wired or Wireless..

3.2.4. Settings screens – Group & General Settings



Click the Group Button to open the Group & General settings screen



Click the Apply Button to accept the changes – returning to the main screen without applying will return to the previous status

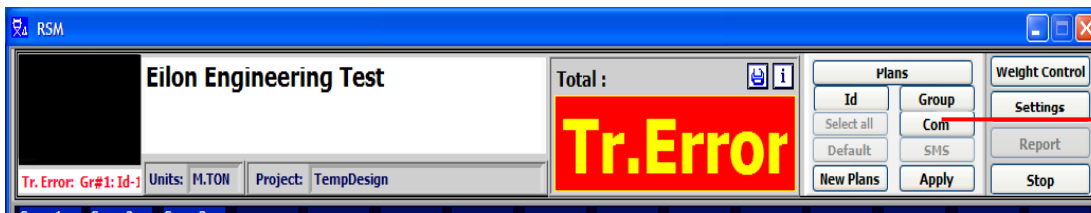
28 – Unit Selection

29 – Total Overload

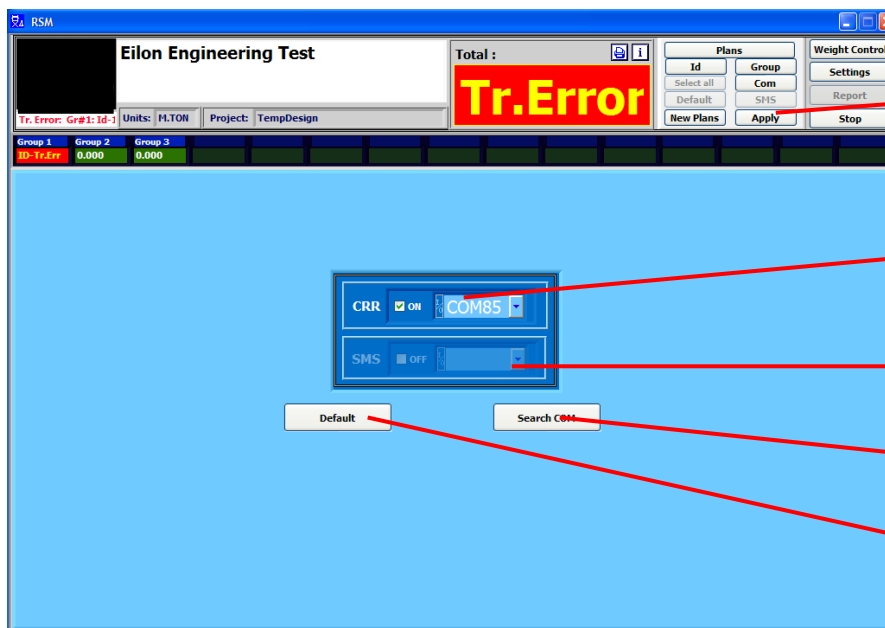
30 – Report generation–On/Off

31- Report Cycle time– when no changes are indicated in the report

3.2.5. Settings screens – Communication (COM/port) connection



Click the COM Button to open the SET COM settings screen



Click the Apply Button to accept the changes – returning to the main screen without applying will return to the previous status

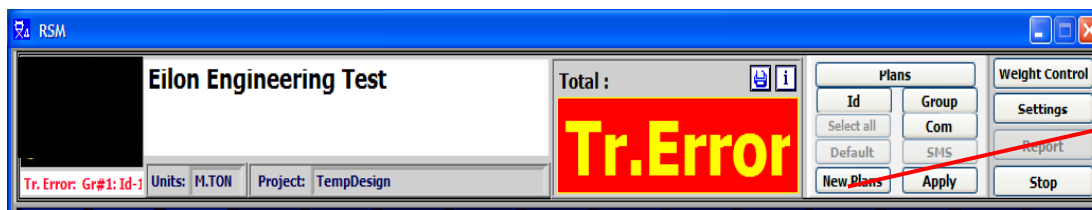
32 – COM of CRR

33 – COM for SMS Option

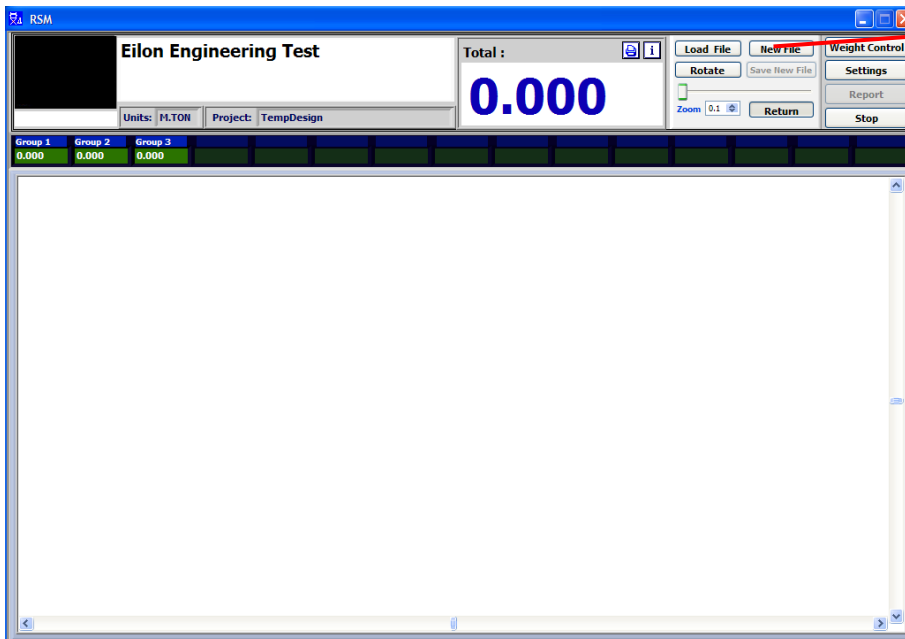
34 – Starts to search the COM after CRR is connected

35 – Resets the COMS

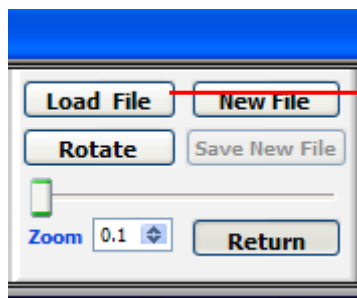
3.2.6. Settings screens – plan - background setting installation



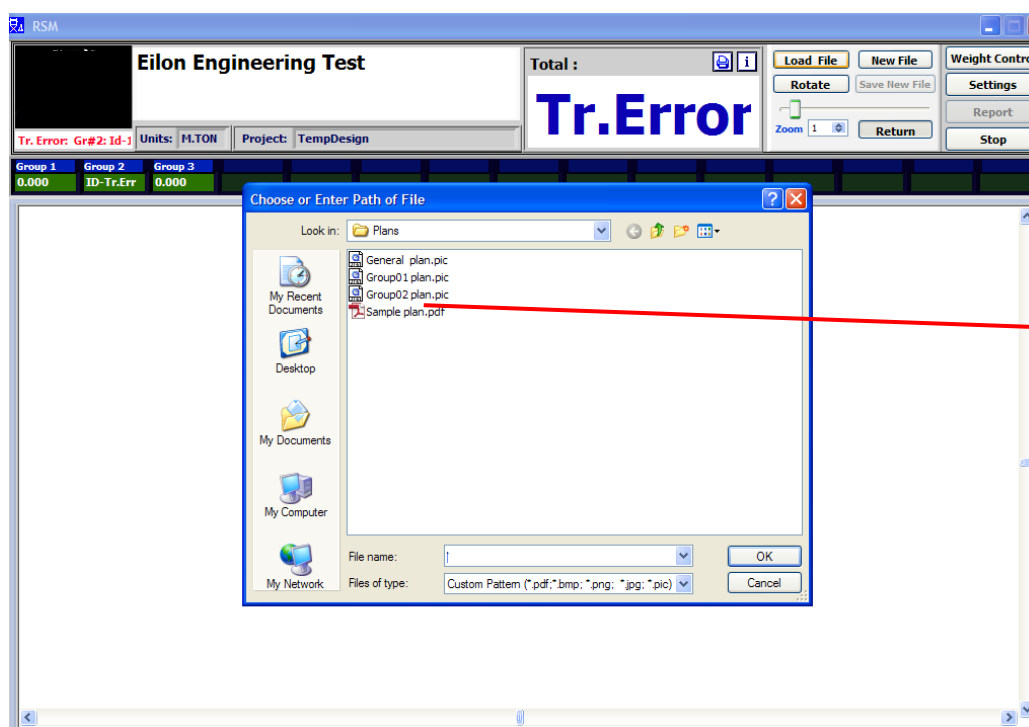
Click the New Plans Button to open the New Plans settings screen



36 - Click the Load File Button to start the process of adding a Plan/background .

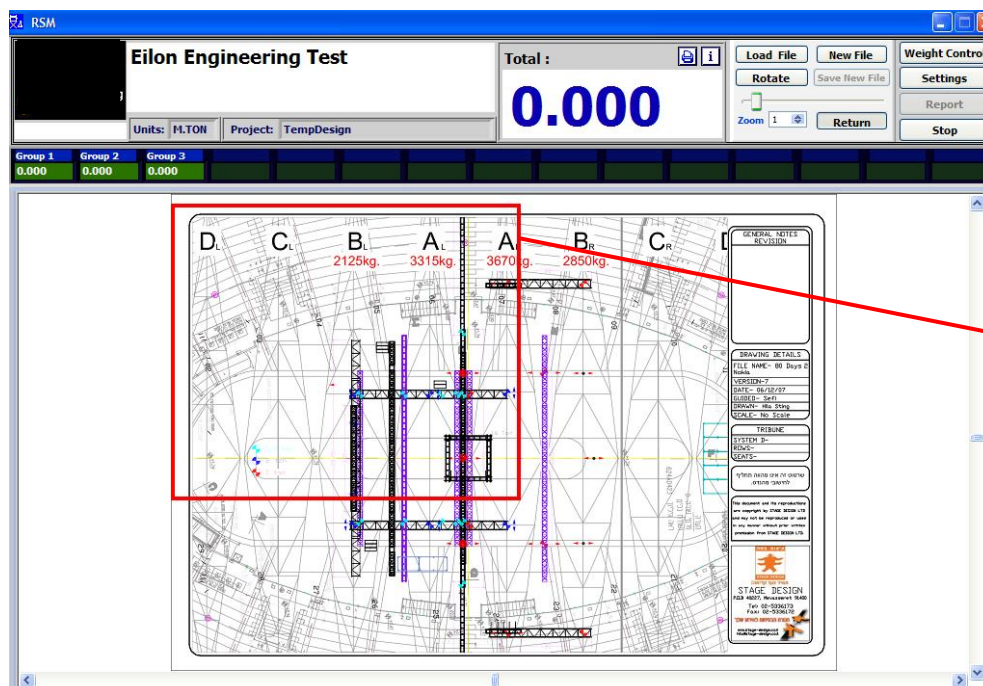


Click the Load File Button to start the process of adding a Plan/background .



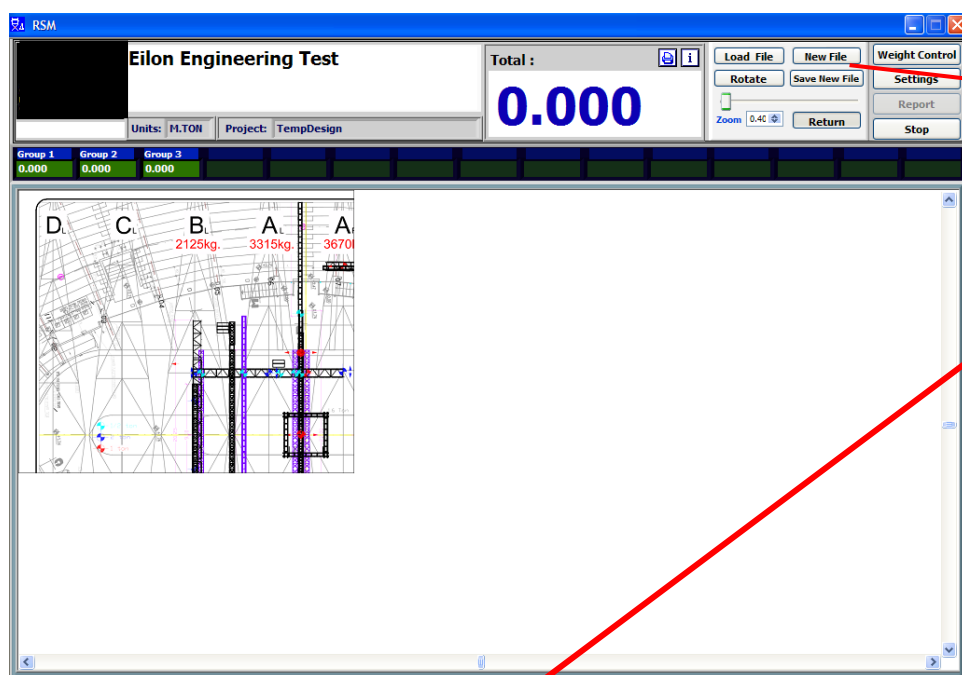
41

Select any Bmp, Jpeg, Jpg or PDF file from the PC.

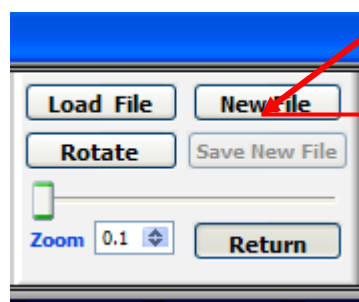


42

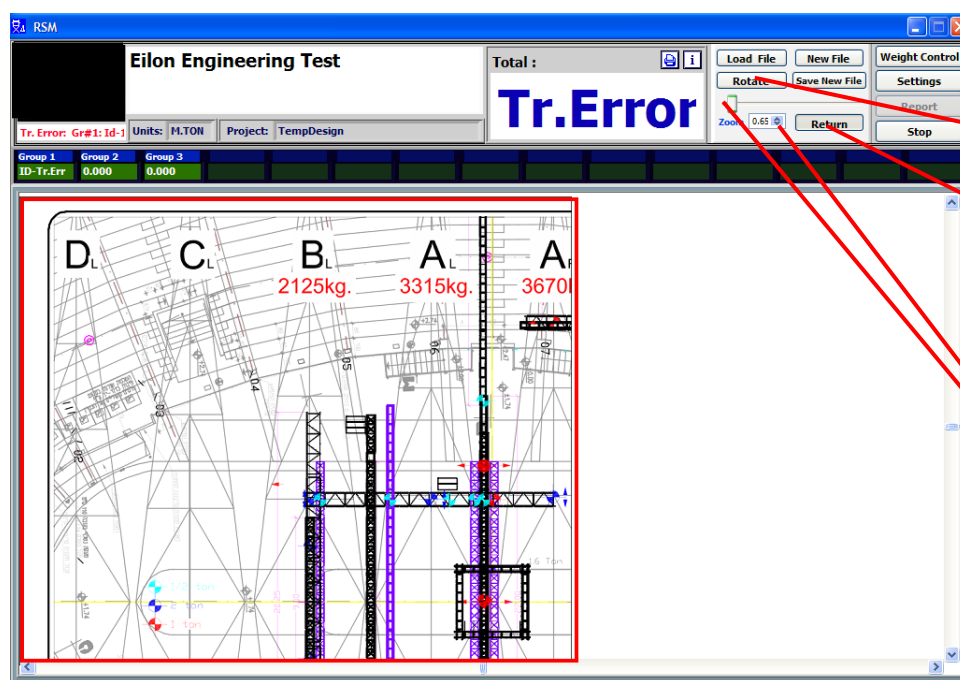
Use the mouse to select part or all the plan/drawing you wish to have as a background. Doing this will create a New File .



37 - New File



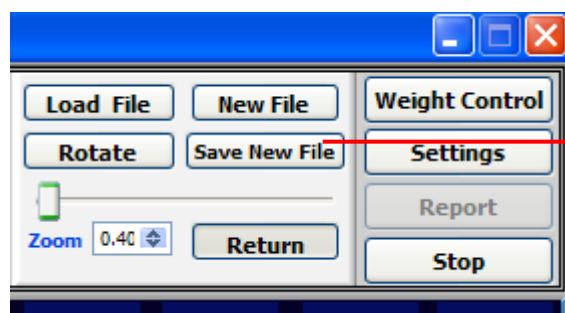
Click the New File Button to start the process of setting the selected Plan/background – setting size, location and direction



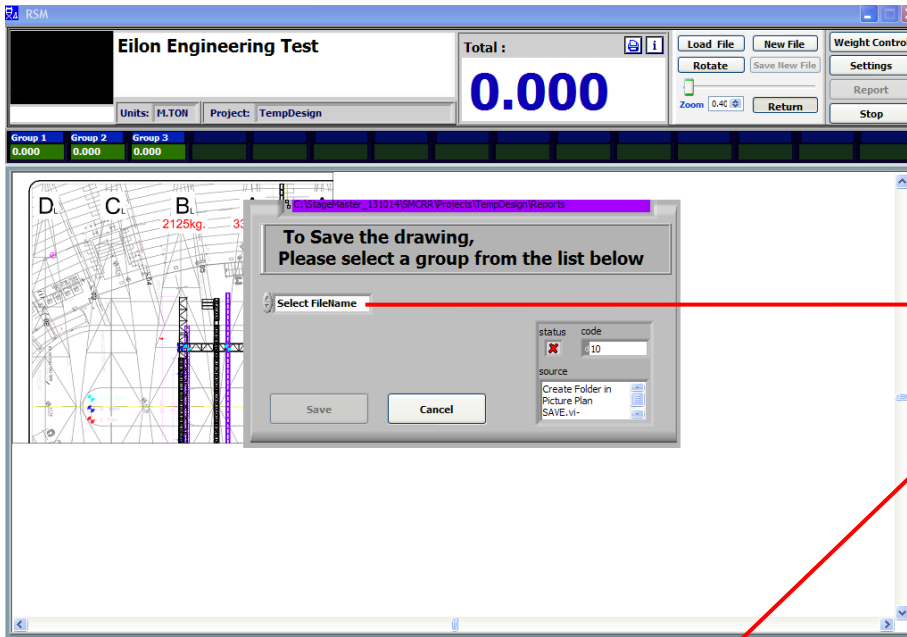
38 – Rotate the plan

39 – Return one step backwards

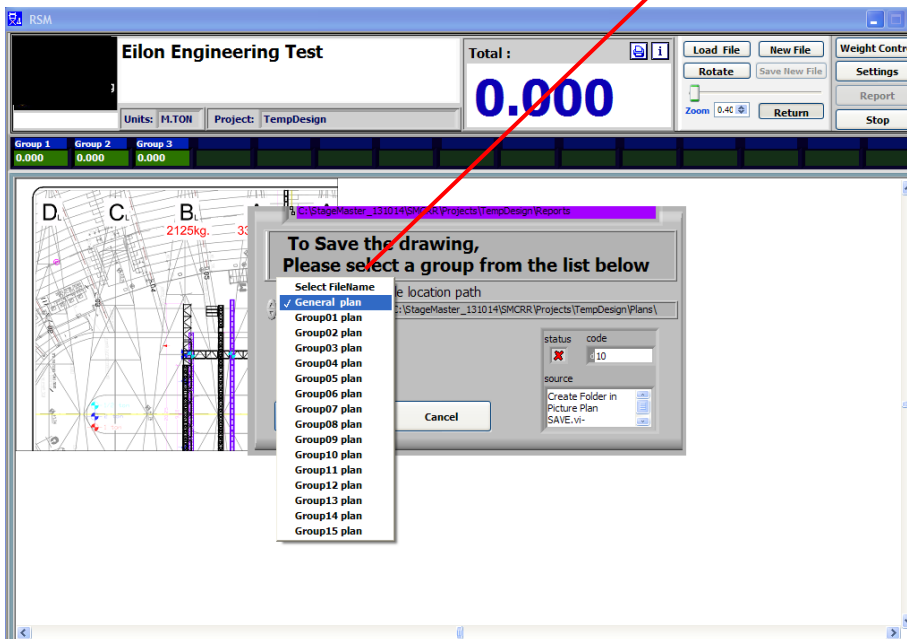
40 – Zoom in/out the plan by scale or numbers

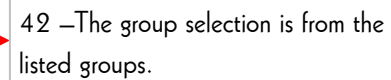
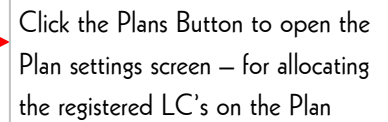


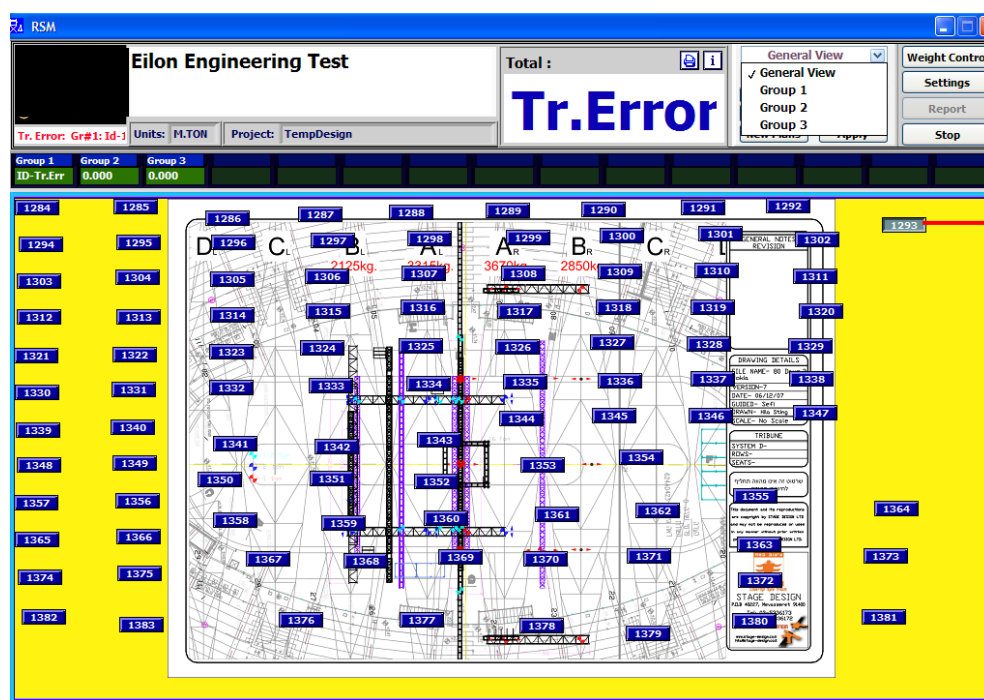
Click the Save New File Button to save the selected Plan/background.



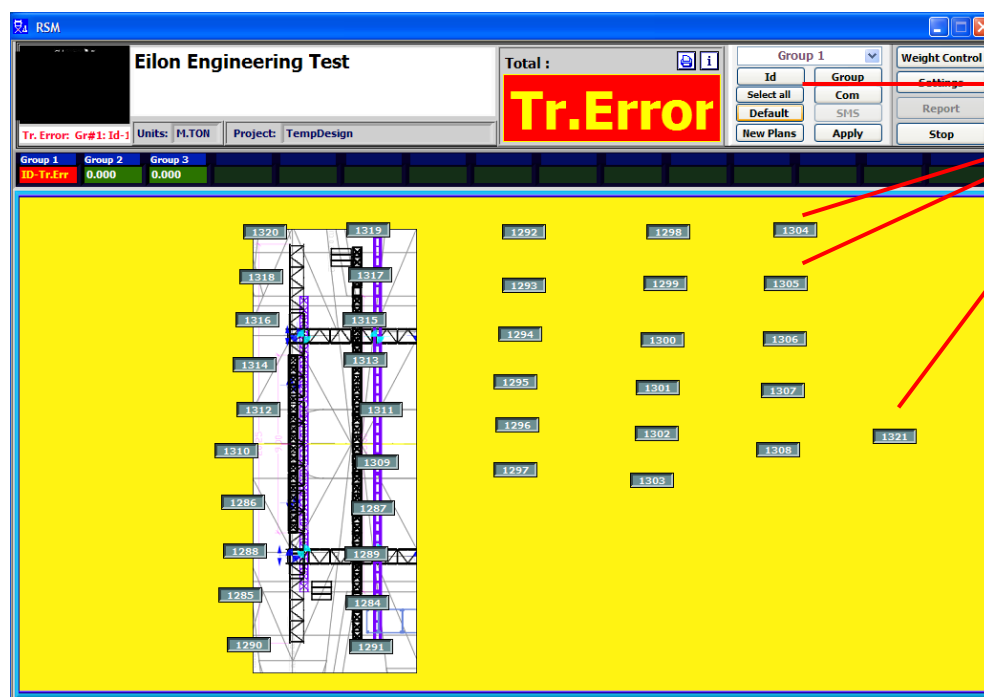
Select the Group you wish to relate to the selected plan







43 – LC selection before allocation – need to select it with mouse click on it and then another click on the location you want the LC to be located.



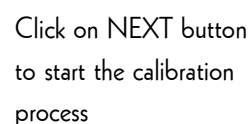
44 – Clicking on the Select all button will pick all LC's at once.

The screenshot shows the StageMaker software interface. At the top, there's a header with 'RSM' and 'Eilon Engineering Test'. Below this, a 'Total:' section displays 'Tr.Error' in a large red font. To the right, there's a 'Group 1' dropdown menu and a 'Weight Control' section with buttons for 'Id', 'Group', 'Com', 'Settings', 'Select all', 'Default', 'New Plans', 'Apply', and 'Stop'. Below the header, there's a table with columns for 'Group 1', 'Group 2', and 'Group 3'. The 'Group 1' column shows 'ID-Tr.Err' and '0.000'. The 'Group 2' column shows '0.000'. The 'Group 3' column shows '0.000'. Below the table, there's a large yellow area with a technical drawing of a stage structure. To the right of the yellow area, there's a list of load cells (LCs) with their IDs and weights. The list starts with '1309 1284' and ends with '1308 1296'. Red arrows point from the 'Default' button and the 'Apply' button to explanatory text boxes.

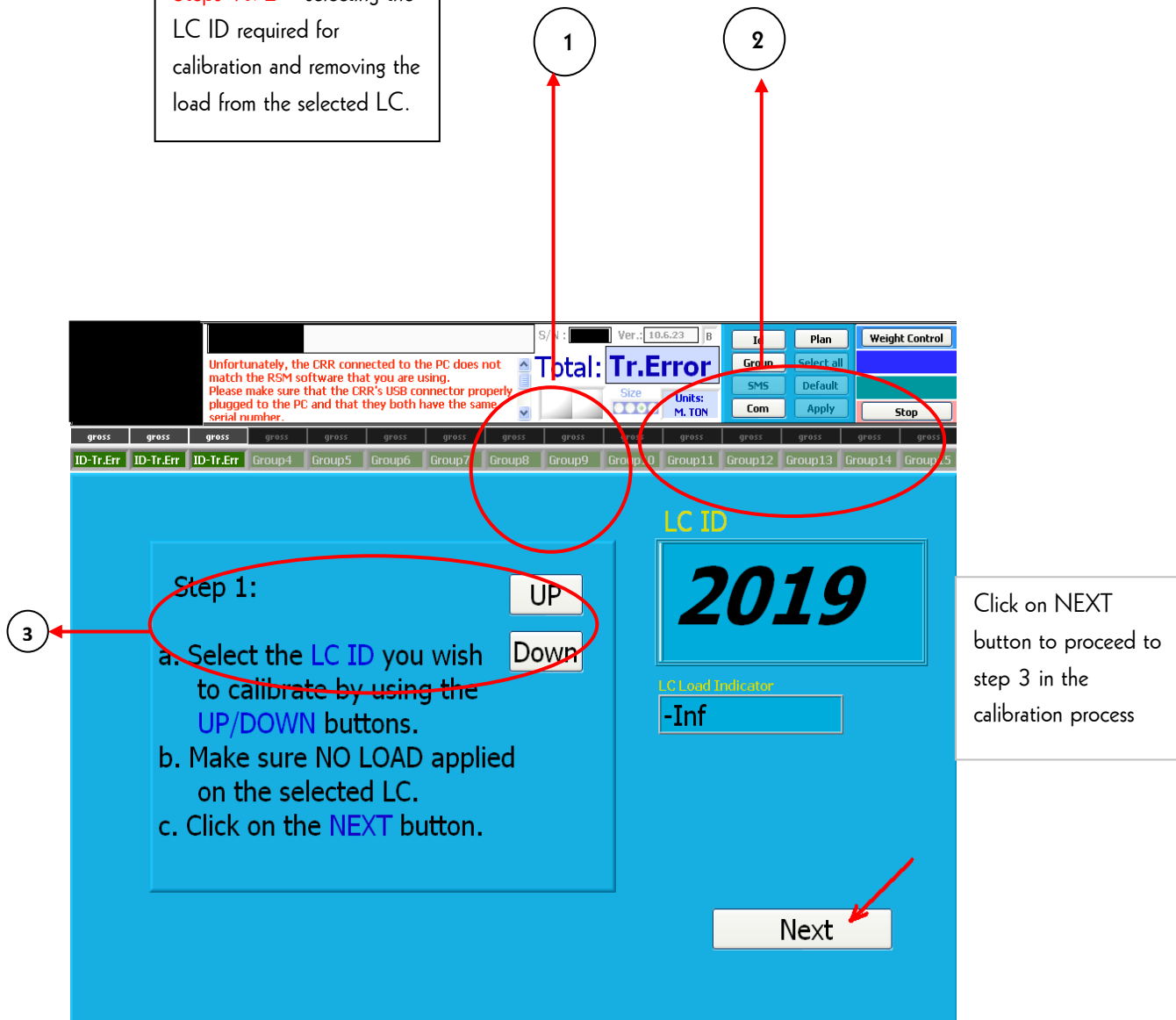
45 – Clicking on Default after selecting all will return all the LC's to its original position (warehouse)

Click the Apply Button to accept the changes – returning to the main screen without applying will return to the previous status

Irrelevant reception phenomenon - Please note that when operating the system, especially when no load is applied to the LC, a single readout may be received and appear on the display for a second and then disappear. The only recognition of this will be shown in the report and in the MAX status (if the load applied to the LC is lower than that of the readout). This readout can easily be identified when checking the report - it will be an exceptional figure compared to the previous and following readouts. Please ignore it.



Steps 1 & 2 – selecting the LC ID required for calibration and removing the load from the selected LC.



- 3.3.1. **1 – ID SELECTOR** – (1st step in calibration). Used to scroll the LC ID's (up and down) to select the one that requires calibration. Before selecting it for calibration, the LC must be ON and transmitting (there is a readout of the specific LC in the "LC Load Indication" field) and it should remain open until the end of the calibration process.
- 3.3.2. **2 – ID FOR CALIBRATION** – This number represents the LC ID selected to be calibrated.
- 3.3.3. **3 – MIN/ZERO** – (2nd step in calibration). This note is to emphasize that the LC needs to be with NO LOAD applied upon, that way it will reflect the MINIMUM figure the LC achieved and displayed AFTER the load was removed from the LC and the person doing the calibration selected the required ID and by clicking on NEXT button, determine the minimum status of the LC to be zero. Clicking on the NEXT key will accept the process.

Steps 3&4 – Loading the LC to capacity and defining the MAX load of the LC (original capacity)

Unfortunately, the CRR connected to the PC does not match the RSM software that you are using. Please make sure that the CRR's USB connector properly plugged to the PC and that they both have the same serial number.

S/N : Ver.: 10.6.23 8

Total: Tr.Error

Units: M.TON

Id Plan Weight Control

Group Select all

SMS Default

Com Apply Stop

gross gross gross gross gross gross gross gross gross gross gross gross gross gross gross

ID-Tr.Err ID-Tr.Err ID-Tr.Err Group4 Group5 Group6 Group7 Group8 Group9 Group10 Group11 Group12 Group13 Group14 Group15

Step 2:

- Load the selected LC to the original capacity.
- Make sure the load in the LC Load Indicator is approximate to the original capacity.
- Make sure that the communication between the LC and the CRR is good (no Tr. Err.).
- Type the original capacity figure in here.
- Click on the **NEXT** button.

LC ID

2019

LC Load Indicator

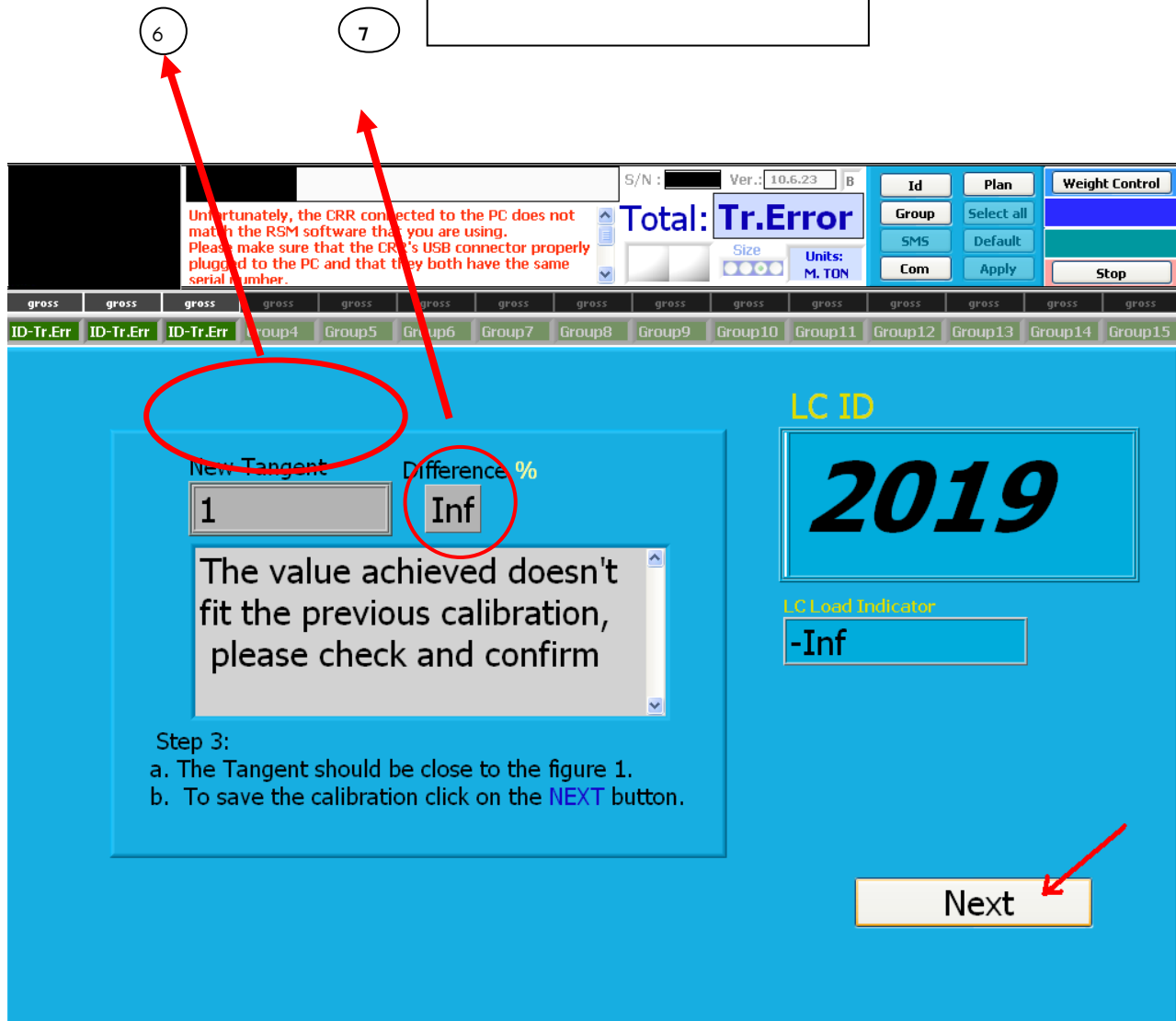
-Inf

Next

Click on NEXT button to proceed to step 2 in the calibration process

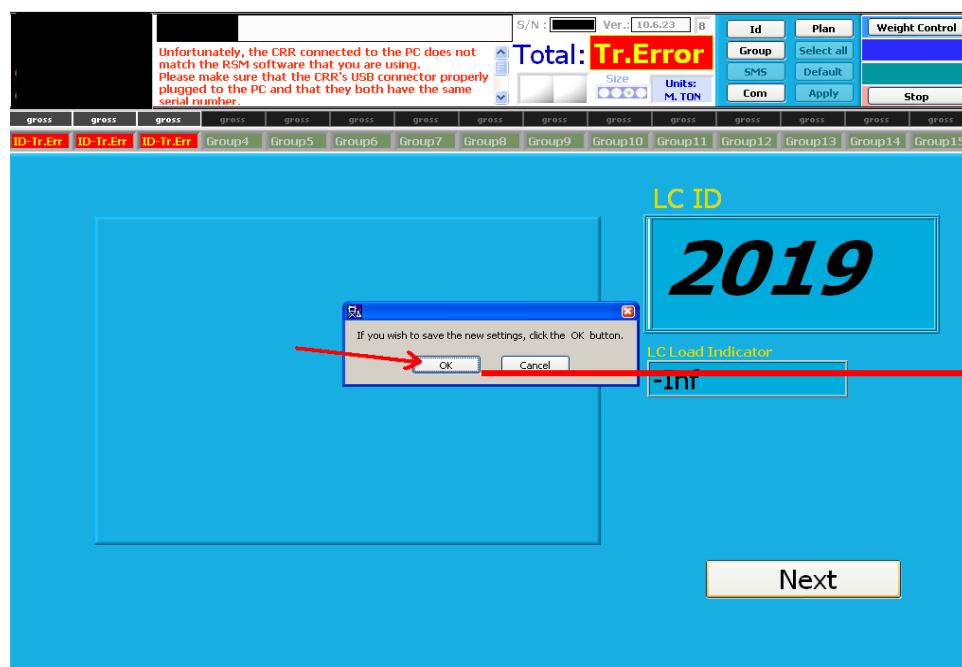
- 3.3.4. **4 – LC Load Indicator** (3rd step in calibration)– This field represents the load applied on the LC during the calibration process, following the load process, the load will be displayed in this field. The figure required in this field should be as approximate as possible to the LC ORIGINAL capacity.
- 3.3.5. **5 – MAX** - (4th step in calibration). This field is used to define the MAXIMUM figure (original capacity) the LC achieved and displayed. AFTER the LC has been loaded to the LC's maximum capacity, and by using a known weight approximating to the LC's load capacity, the person doing the calibration types the LC capacity (maximum) as shown in. Clicking on the NEXT key will accept the process.

Step 5 – Finalizing the calibration process
– checking the results (tangent close to 1)



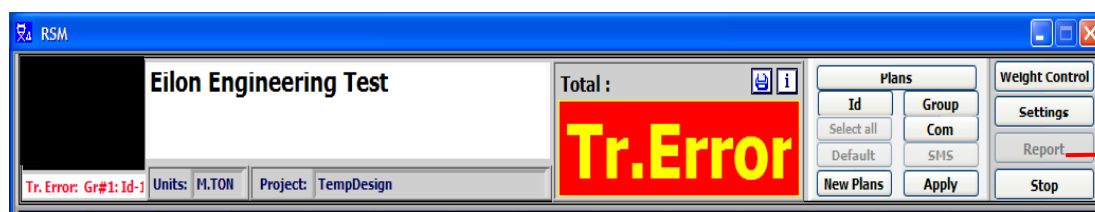
Click on NEXT
button to
finalize the
calibration
process

- 3.3.6. **6 – TG** – Represents the angle of the calibration graph. Needs to be as close to the figure 1.
- 3.3.7. **7 – Difference** – The percentage needs to be as small as possible – that will represent a good calibration process. Clicking on the NEXT key will accept the process.

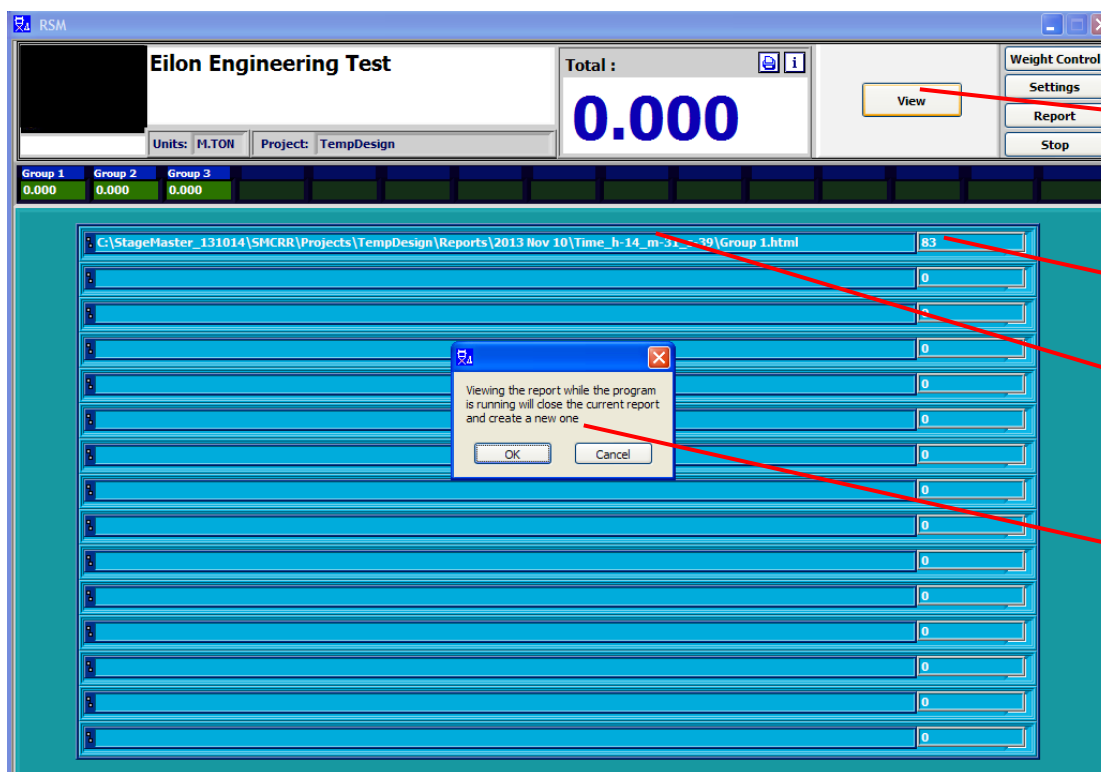


Click on OK button to save the calibration process

4. 15 Reports



Click the Report Button to open the report status screen



View report selected

Viewing the selected reports.

This action will open a new report file (the program is still running and reporting)

Number of lines sent to the report

Report file location

Location of the report file and the report name (date time)

Clicking on the View button will require closing the current report and starting a new report as the report generated in real time.

Samples of report:

Loading Report 2010 Feb 21 14:17:12

CASA DA MUSICA

S/N: 6000370

Group: top (top structure) Capacity: 12.000 M. TON

Time	ID	Weight	Remarks
	#1021	0.000	
	#1022	0.010	
14:17:12	Sum	0.010	
	#1021	0.000	
	#1022	0.010	
14:17:13	Sum	0.010	
	#1021	0.016	
	#1022	0.008	
14:17:15	Sum	0.024	
	#1021	0.000	
	#1022	0.000	
14:17:21	Sum	0.000	

Operator : CDM Signature: _____

ID	Capacity	Cust.Overload	Max
1021	1.000	1.000	0.018
1022	1.000	1.000	0.010

Systems' general information including date & time of the report, Serial Number, group name, capacity of LC's and units.

Report including all the logged data

Operator name set in the login for settings

LC's allocated in the group, it's capacity, set Overload and Max values.

StageMaster Report

file:///C:/StageMaster_131014/SMCRR/Projects/TempDesign/Reports/2013%20Sep%2030/Time_h-07_m-50_s-04/Group1.html

Loading Report 2013 Sep 30 07:50:04

Eilon Engineering Test

S/N: 130929

Group: Group1 Capacity: 40.000 M.TON

Time	ID	Weight	Remarks
	2205	Danger	Danger
07:50:04	Sum	1.990	Danger
	2205	1.990	Danger
	2206	1.990	Danger
07:50:08	Sum	3.980	Danger
	2205		Danger Tr.Error
	2206		Danger Tr.Error
07:50:26	Sum		Danger Tr.Error
	2205	Danger	Danger
	2206	Danger	Danger
07:50:28	Sum	3.980	Danger
	2205	2000	Danger
	2206	2000	Danger
07:51:04	Sum	4000	Danger
	2205	Danger	Danger
	2206	Danger	Danger
07:51:08	Sum	3.980	Danger
	2205	2000	Danger
	2206	2000	Danger
07:51:27	Sum	4000	Danger

Sample of warnings shown in the report

Optional Features

1.SMS Alert –This OPTIONAL feature is a remote control unit for the senior operative in charge. This feature is used to inform the responsible person of any change/problematic status in the system installed when he is absent from the installation site. **Until formal update – this application does not operate in Vista OS.**



1.1. SMS unit parts: the unit, antenna, cover and two screws.



1.2. Inserting the SIM card to activate the unit:



1.3. The unit opens at the back:

- 1.4. Open the SIM tray by sliding it toward the antenna and lifting it vertically:



- 1.5. Slide the SIM card in to the tray, close and slide the tray back to its original position and carefully screw the antenna into the socket provided for it:



>



>



- 1.6. Close the lower cover and tighten the two screws to secure the cover to the unit:



- 1.7. Plug the unit's USB connector into the PC, select "search com" in settings (section 3.2.4) and click on the "SMS" function key :

SMS setting

SMS setting screen -

APPLY / Save

Click to receive and save all the changes. – will turn ON following

Addressee Name

complete this field with the name of the person to receive the message.

Will be shown in the SMS message.

Search com

Location fill up

Will be shown in the SMS

Active address

Checking this field will activate the address. Can be checked only after specifying the location

Status update

Which of the exceptional statuses (Overload, Danger or Under-load) to send that will be shown in the SMS message.

Sending frequency

Selecting how often the personnel listed above will receive update of the same status (if the status not fixed/changed)

Addressee phone number

Complete this field for the destination of the message. Can be sent to overseas numbers (using + before the country code).

Location of the event: festival

Active	Name	Phone number	Danger	Overload	Underload
☒	manager a	13456789	☒	☒	☒
☒	manager b	080808088	☒	☒	☒
☒			☒	☒	☒
☒			☒	☒	☒
☒			☒	☒	☒

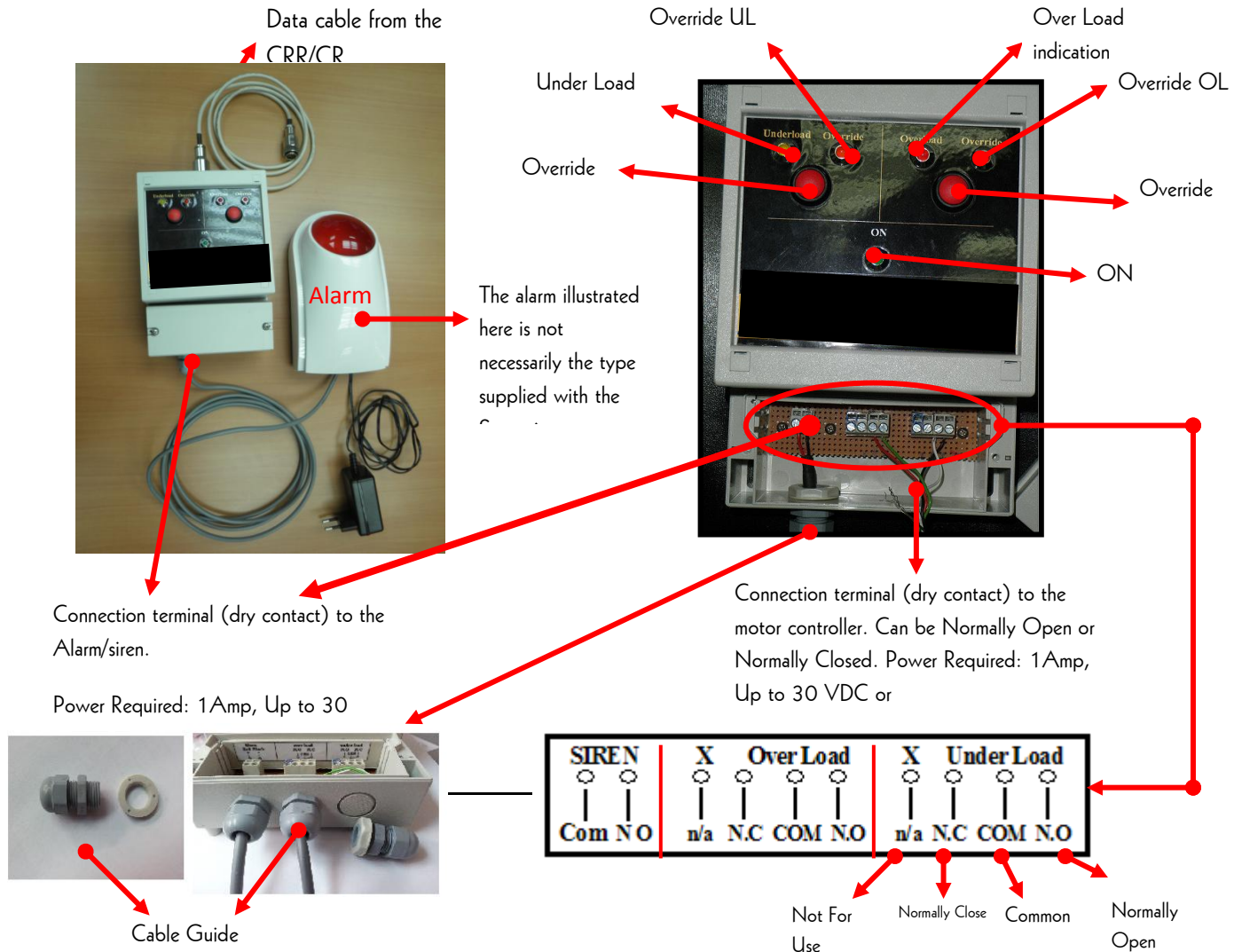
Frequency of sending (Minute): 10

Test message: Clicking for sending a test message to

Save settings: Clicking for saving the changes before

Buttons: Test, Save

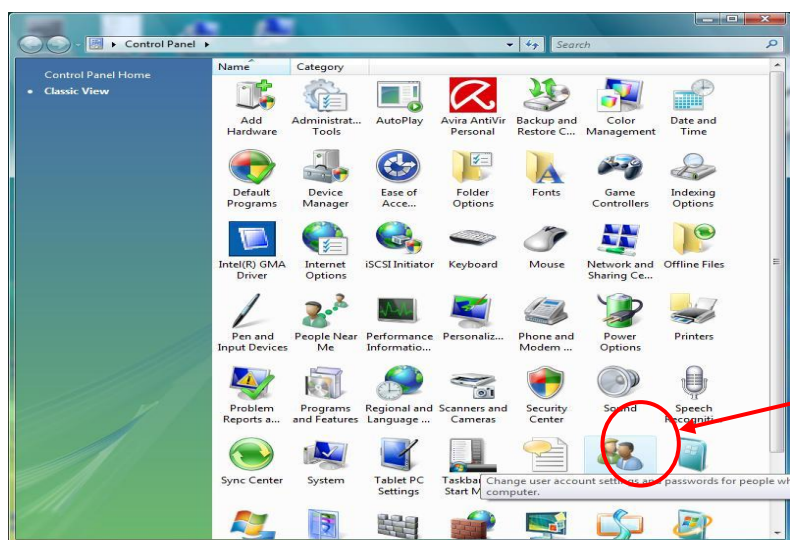
- 2. Set Point** - This OPTIONAL feature allows the user to set and control the motors used (stop the motor/s in case of a hazardous situation). It can be applied on any kind of motor controller using a relay (interface unit – see photo below) using dry contact and a basic status of Normally Open or Normally Closed, per user requirement. The output may be applied on activation of any kind of alarm/alerting light along the motor controller stop command. In case of using the Smartt™Box of Real Rigging – there is a direct connection to the controller between the set point interface and the Smartt™Box



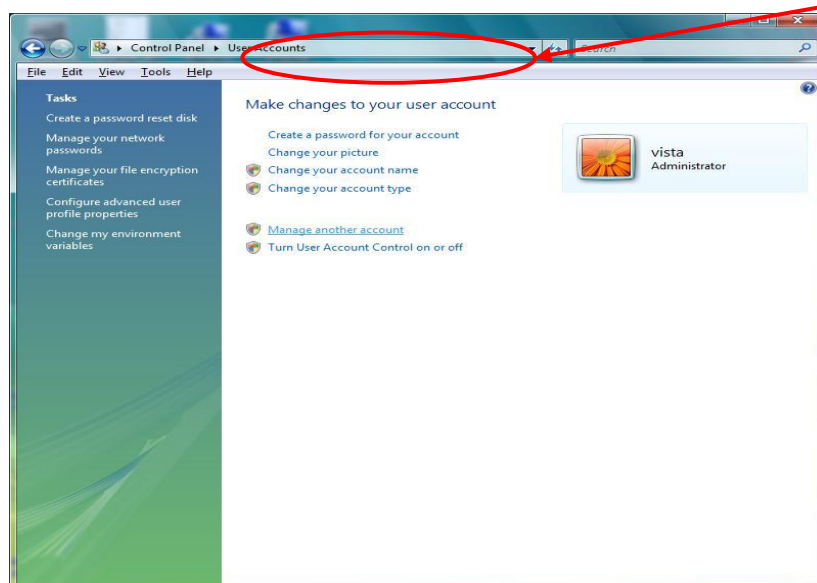
Vista/Win7/ Win8 Operation System Users

In order to open the Vista OS the UAC must be unchecked, as described in the following steps:

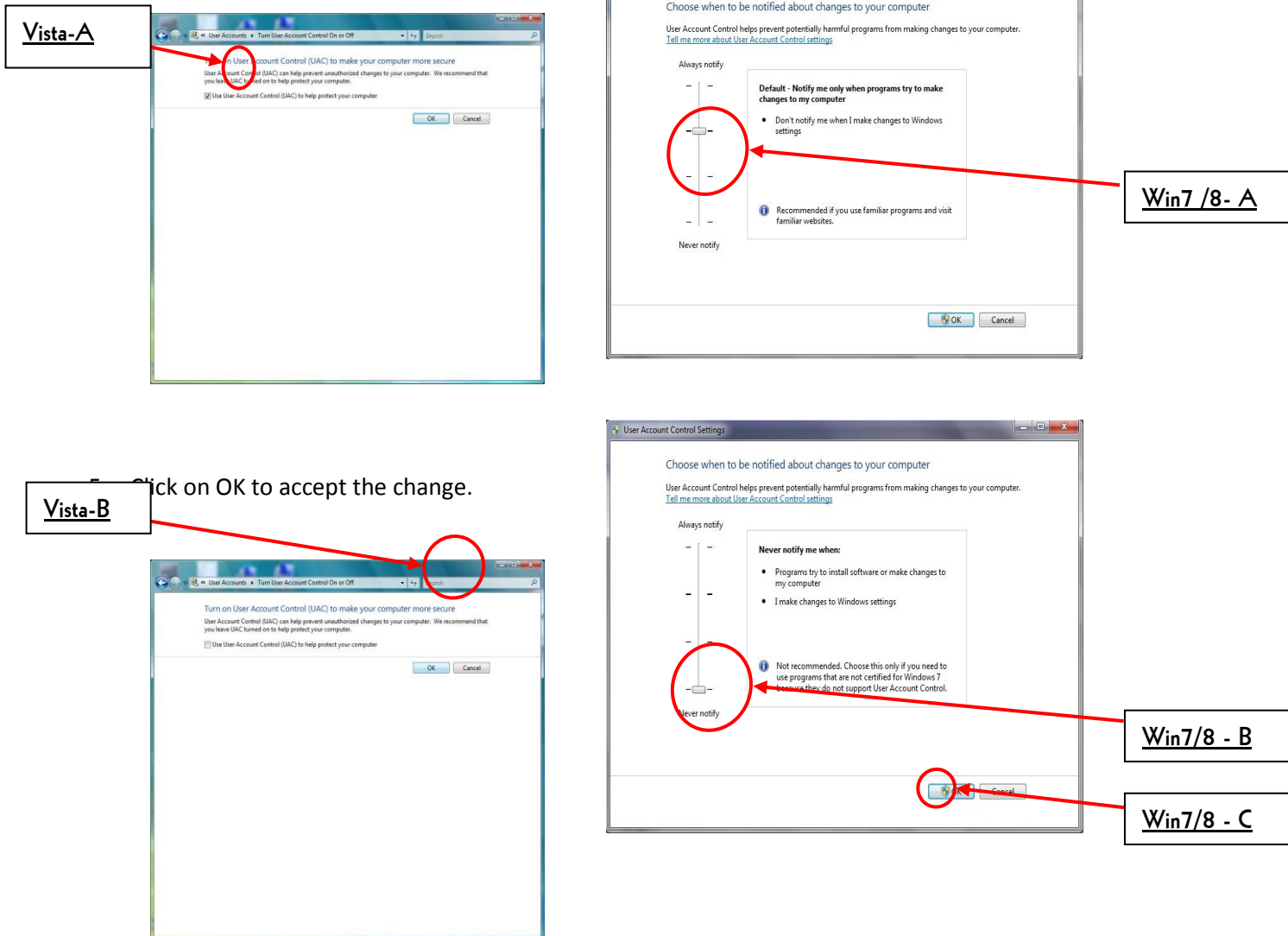
1. Open control panel located in the “start” menu.
2. Select the marked icon “change user account”



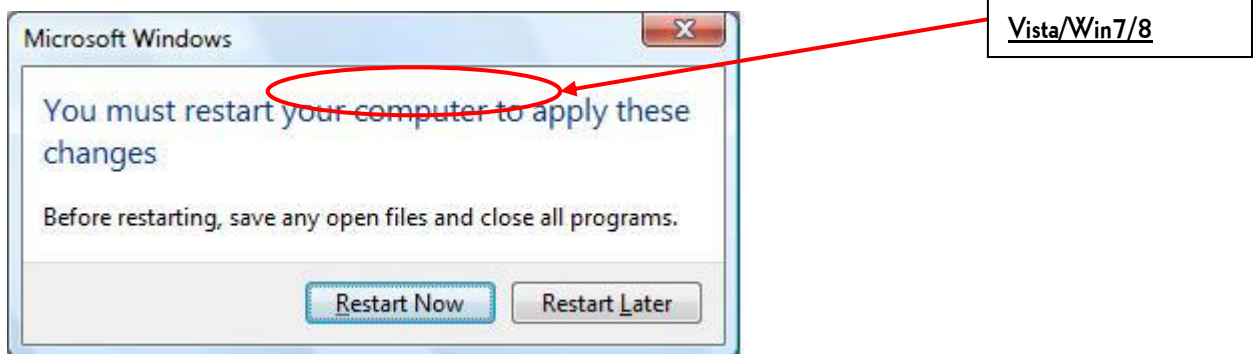
3. Select and double click on “Turn User Account Control On or Off”



- Click on "Use User Account" to uncheck it as shown below.



- Click on Restart Now to apply the change.



Web Browser option

Installation instructions for Eilon engineering remoute display via Web Server

Ver. 01.4

Hardware requirements (Cloud server requirements):

- **Dedicated CPU 2.6GHz**
- **Dedicated RAM 5GB**
- **Disk space 60GB**
- **Network transfer 20Mbps**
- **OS - 2008 R2**
- **SQL SERVER 2008 R2**
- **IIS7**

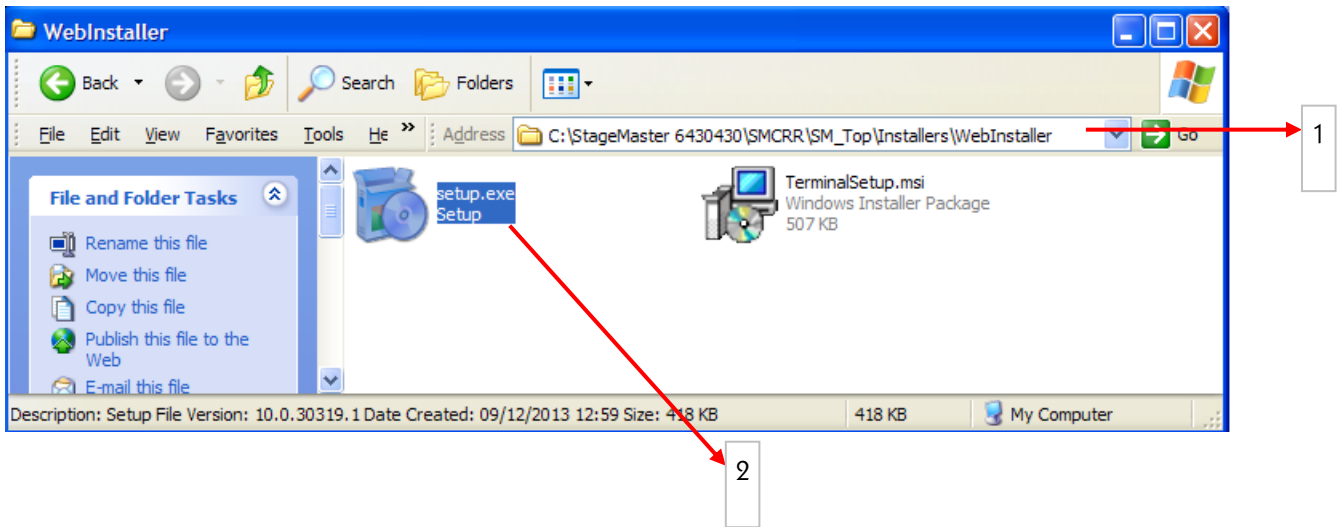
Files and folders accompanying this document – Located in the installation disk supplied with the system (WEB):

1. Platform.bak – file.
2. EilonDemo – file.
3. PlatformTerminalSetup– file.

Installation procedure :

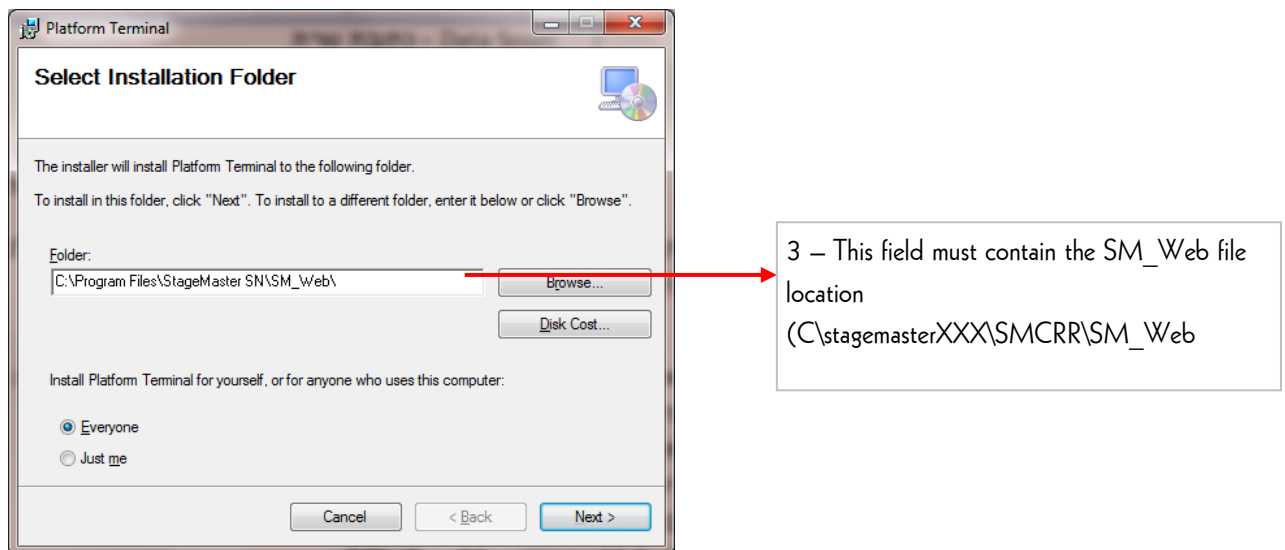
1. **Server – A system administrator should handle this part.**
 - a. **DB – Start with opening SQL in the server, connect to SQL server and select the "Restore Database" option. Please select the "Platform.bak" file and name the new DB „Platform“.**
 - b. **Site – Please open the „Web.config" file in the "EilonDemo" folder and –**
 - i. **Change the Connection String and update in it the :**
 1. **Data Source – server address.**
 2. **User ID – Data base user name.**
 3. **Password – the database user password.**
 - ii. **Update the SystemTimeout - that is the time frame that crossing it will show the discommunication error.**
 - iii. **Update the UpdateDataInterval – This defines the rate (interval) that the data will be updated in the site/DB.**
 - c. **Copy the folder EilonDemo to the wwwroot folder and conduct ConvertToApplication on the folder in IIS.**

2. Terminal – Open the EXE file in the PlatformTerminalSetup folder in the PC that runs the system.



- 1 – This is the location of the Platform Terminal installer.
- 2 – This is the Platform Terminal installer.

- a. Select the rout where the data files are gathered.



- b. Then, update the following two parameters :
 - i. For the "WCF address" parameter type the site address and add the "/PlatformManager.svc/default" i.e. – if the site address is <http://82.80.211.176/Eilon> , add the "/PlatformManager.svc/default" to it as shawn below :
<http://82.80.211.176/Eilon/PlatformManager.svc/default>).

- ii. For the “Data transmission rate” parameter, type in the desired data transmission range in seconds.

Platform Terminal

Settings

Please define the following settings

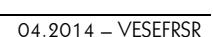
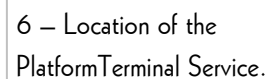
WCF Address:
http://82.80.211.176/Eilon/ PlatformManager.svc/default

Data transmission rate: (in seconds)
60

Cancel < Back Next >

4 – This is the address that will be used to view remotely the indication

5 – This is the time that the data will be sent to the Web from the PC-Terminal – 1Sec is recommended.



4. Finally, to remotely view the data of the system, use the site link provided to approach the display as below sample view from any portable or desk device .

