

# CS 440RC

Solid De-icer Controller Desktop Software Manual



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# 1 System Requirements

System	Requirements
PC Workstation	Windows 98/ME/2000/NT/XP 64M RAM or higher CD-ROM 800x600 display or better
Handheld Palms	M100, M105, M125, M130, M500, M515 Visor Platinum, Visor Pro Palm OS 3.5, 4.0, 4.1 (HotSync software comes with Palms listed above)

**Caution:** Only above listed models are supported by the Compu-spread Desktop Software. Other models may work with the software, but no support will be available from Compu-spread.

## 2 Software Installation

The desktop software is being used to store CS-440RC parameters and logged data, and generate reports. And it requires a computer to run the software, and a Palm pilot device to transport info from/to a CS-440 spreader controller. Both Computer and Handheld device have to meet the requirements listed in the above System Requirements.

Before installing the Compu-spread Desktop software, first install the Palm HotSync software from the Compu-spread CD, located at  
 \440\_CD\_Installation\_Standard\_Package\extras\palm desktop ver 4\

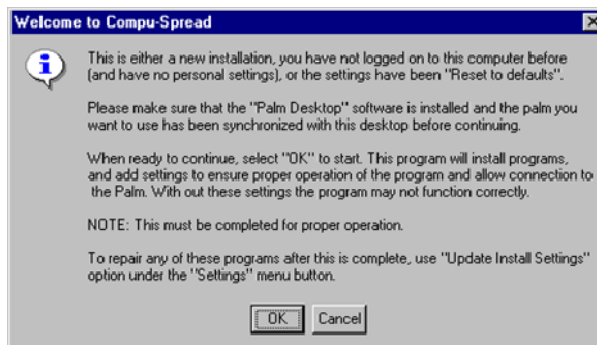
The filename for the HotSync installation package is PalmDesktop41SP03ENG.exe for Windows XP and earlier, or PalmDesktopWin62.exe for Windows Vista.

Before installing Compu-spread Desktop software make sure:

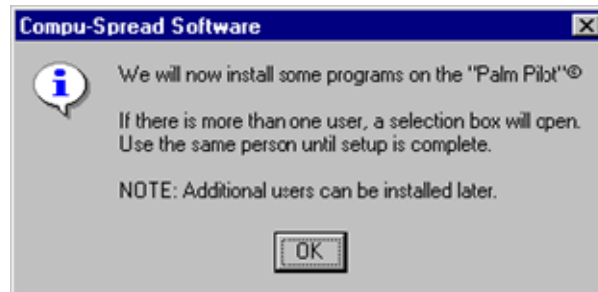
- Have Palm Desktop software installed on the computer that is going to run Compu-spread Software.
- Have a user Identification configured for the Palm pilot/Visor.  
 Note: Use a municipal name, not individual names.
- Make sure the HotSync between the Palm Pilot and the PC work properly.

Once the Palm Pilot is set up, proceed with the Compu-spread Desktop Software installation:

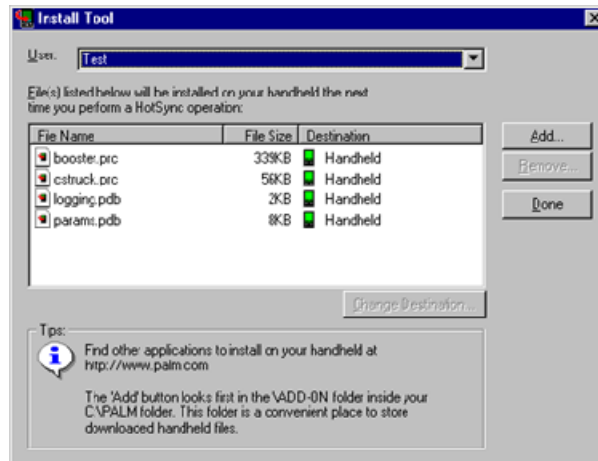
1. Insert Compu-spread Desktop software CD, and AUTORUN should start automatically.
2. Run SETUP.EXE on the software CD If the installation doesn't start.
3. Proceed to complete and restart your PC.
4. Start the Compu-spread Desktop software from your desktop, and the following screen comes up to prompt you for the palm software installation.



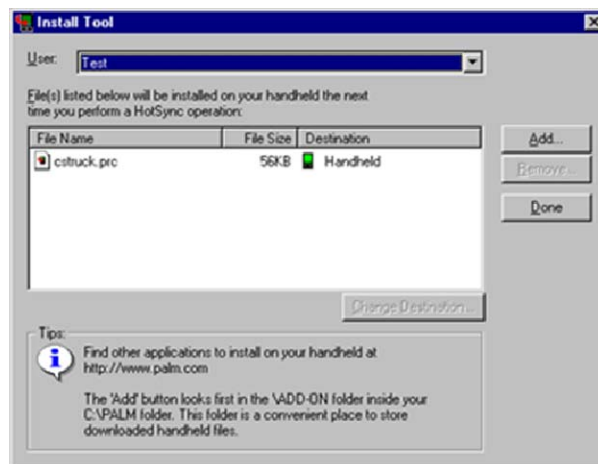
- Press 'OK' to proceed with the installation, or 'Cancel' to skip palm software installation. Press 'OK' button the following screen would show up to advise again that some programs will be installed onto your palm unit.



- Select a username of the palm unit, and press OK to proceed. Then the next screen shows up to show the program to be installed.



- Press 'Done' to proceed and it will prompt you for a few more program installation as shown in the next screen.



8. Again press 'Done' to proceed. Synchronize your palm to complete the palm software Installation.



Once the HotSync is complete Palm unit will prompt to reset your palm. To confirm if the palm works with the Desktop software you need to start 'CSTruck' on the palm, and click on 'Sending Settings'. If you see a record FIRST – SYNC it tells that it works. At this point both Compu-spread Desktop Software and Palm Software is ready to operate.

### 3 Get Settings from a CS-440RC Spreader Controller



1. Make sure that truck is stationary.
2. Turn on the Palm and the CS-440RC Controller.
3. Start 'CSTruck' program on the Palm.
4. Select 'Get Settings from Truck'.
5. Point Palm Infra-red window at the CS-440RC infra-red window.
6. Select 'Get Settings'.
7. If the transfer is successful both Region Name and Truck ID would show up on the Palm screen.



## 4 Get Loggings from a CS-440RC Spreader Controller



1. Make sure that truck is stationary.
2. Turn on the Palm and the CS-440RC Controller.
3. Start 'CSTruck' program on the Palm.
4. Select 'Get Log from Truck'.
5. Point Palm Infra-red window at the CS-440RC infra-red window.
6. Select 'Get Truck Log'.
7. If the transfer is successful both Region Name and Truck ID, and date & time of the last event would show up on the Palm screen.
8. A Message window shows up on the controller to prompt you to either 'Delete' or 'Keep' the existing log data.



9. Exit CSTruck program.
10. Place the Palm on the Dock cradle.
11. HotSync the Palm with the computer to transfer data to the computer.

## 5 Send Settings to a CS-440RC Spreader Controller

The desktop software is being used to store CS-440RC parameters and logged data, and generate reports. As shown in the following diagram. It requires a computer to run the software, and a Palm pilot device to transport info from/to a CS-440RC spreader controller



1. Start Desktop Software.
2. Choose a specific truck parameters to transfer.
3. View/Edit parameters.
4. HotSync the Palm with the computer.
5. The parameters are transferred to the Palm.

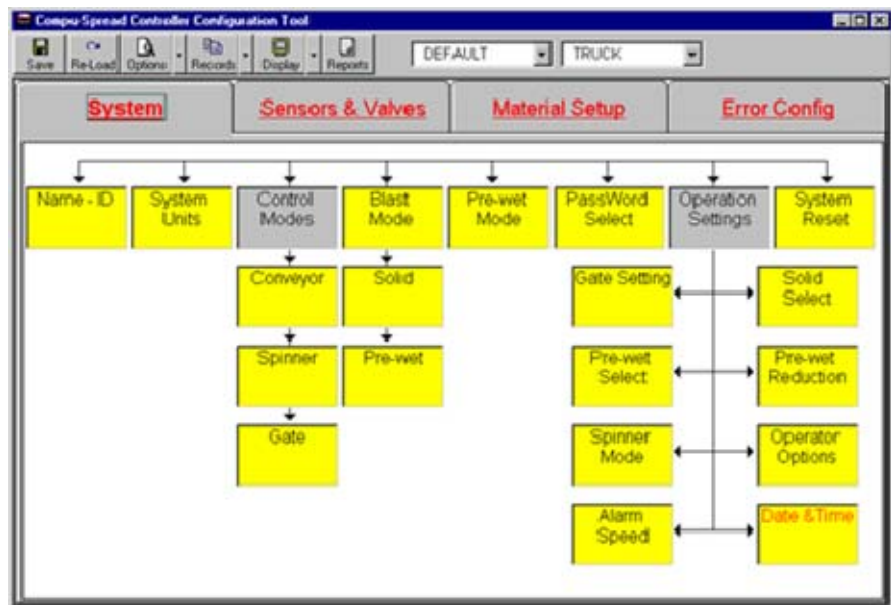


6. Start CStruck program on the Palm.
7. Select 'Send Settings to Truck'.
8. Scroll Up/Down and Select the appropriate truck name.
9. Point Palm to the CS-440RC Infra-Red Window.
10. Click on 'Send Setting'.
11. If the transfer is successful a screen should pop up on the CS-440RC controller to ask for confirmation.
12. Click 'Yes' to overwrite, or 'No' to cancel.
13. The new parameters are now transferred to the truck's controller.

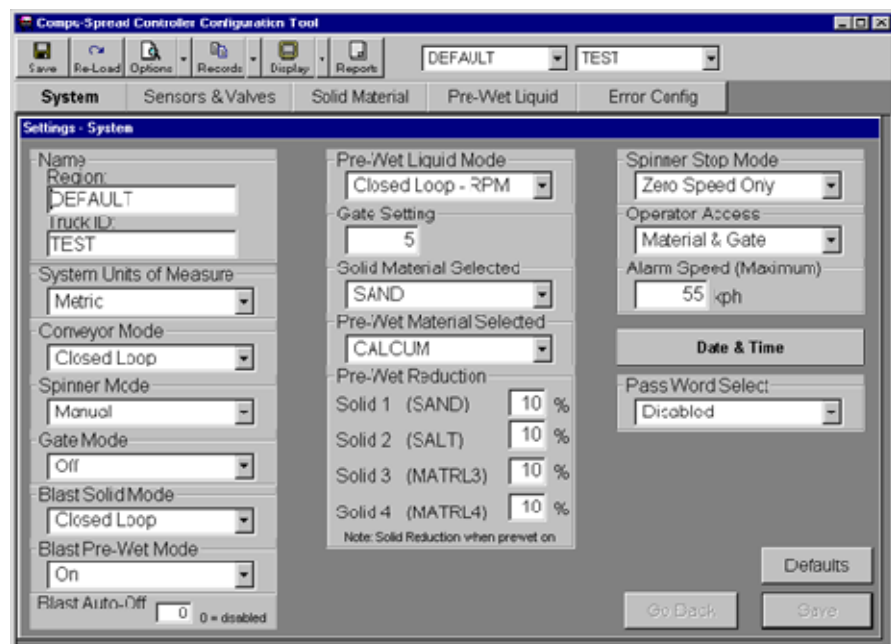
## 6 View Settings with the Desktop Software

1. Select SYSTEM, SENSOR, MATERIAL, ERROR on the menu bar to show parameter groups.
2. Click on the Display Button from the top menu bar to toggle between diagram and the detailed parameter screen

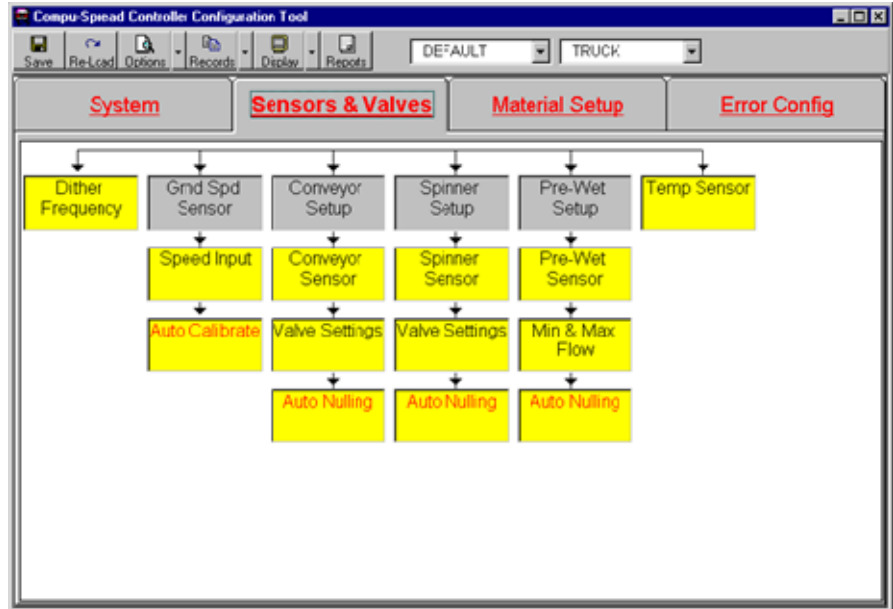
System Settings Diagram



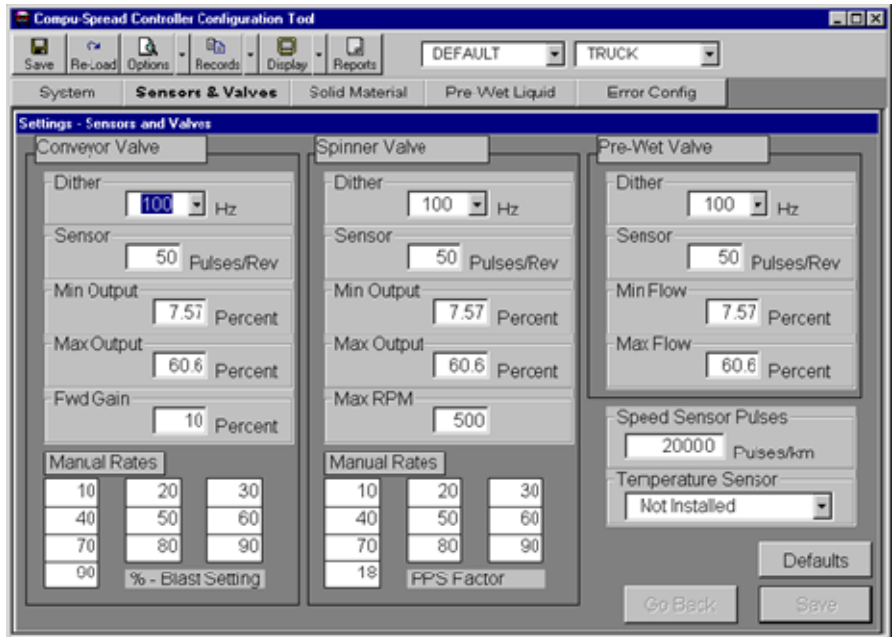
Systems Settings in a detailed screen



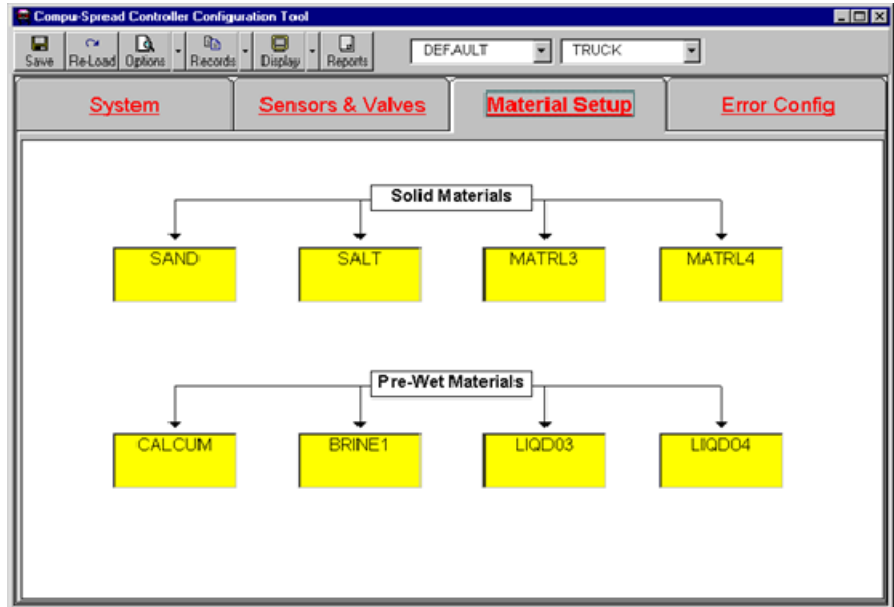
Sensors & Valves Settings in a diagram



Sensors & Valves Settings in a detailed screen



Material Setup Settings in a diagram



Material Setup Settings in a detailed screen

**Settings - Solid Material Setup**

SAND		
30	60	90
120	150	180
210	240	270
270	- blast	
5	- gate	
1.00	- wt/rev	

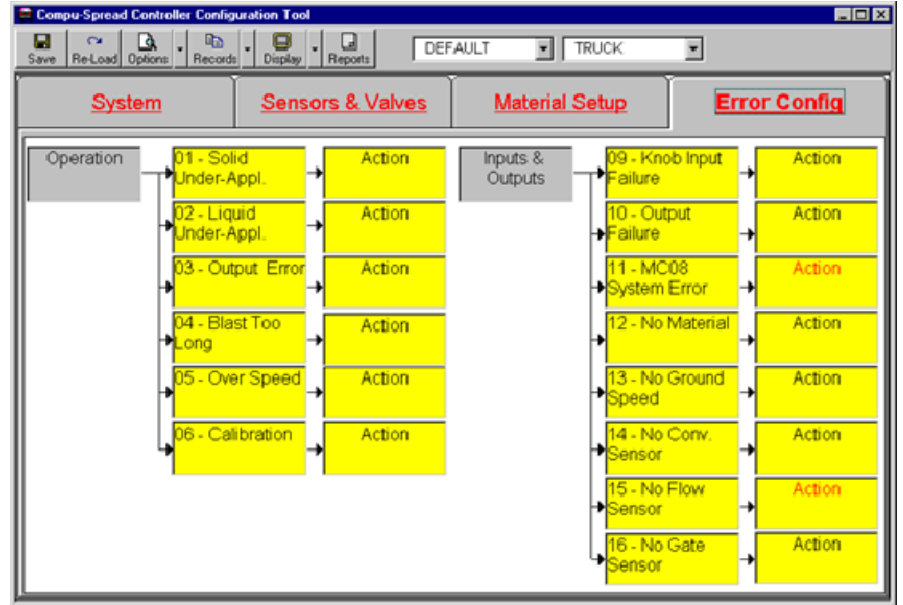
SALT		
30	60	90
120	150	180
210	240	270
270	- blast	
5	- gate	
1.00	- wt/rev	

MATRL3		
30	60	90
120	150	180
210	240	270
270	- blast	
5	- gate	
1.00	- wt/rev	

MATRL4		
30	60	90
120	150	180
210	240	270
270	- blast	
5	- gate	
1.00	- wt/rev	

Defaults    Go Back    Save

Error Configuration Settings in a diagram



Error Configuration Settings in a detailed screen

Error ID	Description	Action	Delay (Sec)
01	Under-Application Solid	Take No Action	5
02	Under-Application Liquid	Take No Action	5
03	Output Error	Take No Action	0
04	Blast Too Long	Take No Action	15
05	Over Speed	Disabled	2
06	Calibration	Take No Action	1
09	Knob Input Failure	Take No Action	5
10	Output Failure	Take No Action	5
11	MC08 System Error (Action Locked)	Go To Manual	0
12	No Material	Output To Zero	20
13	No Ground Speed	Output To Zero	1
14	No Conveyor Sensor	Go To Open Loop	5
15	No Flow Sensor (Action Locked)	Go To Manual	0
16	No Gate Sensor	Output To Zero	1

Buttons: Defaults, Go Back, Save

## 7 View Settings and Generate Reports with the Desktop Software

1. Click 'Report Button' on the top menu bar.
2. Select 'Region' & 'Truck' to view parameters.
3. Click 'View Report' button.

**Compu-Spread Controller Configuration Tool**

Save Re-Load Options Records Display Reports

DEFAULT TRUCK

**Report Designer**

Truck Parameters

Region: MIAMI View Report

Truck: TRUCK-ID Email Report

**Compu-Spread Report**

**Compu-Spread Controller Parameter Settings** Feb 5/2003

Region : DEFAULT Truck ID : TEST Date = 6/18/02 1:43:15 PM

**System Settings**

System Units: Metric	Solid Blast: Closed Loop	Operation Gate: 5
Conveyor Mode: Closed Loop	Pre-Wet Blast: On	Operation Solid: SAND
Spinner Mode: Manual	Blast Auto-Off: Disabled	Operation PreWet: CALCUM
Gate Control: Off	Pre-Wet Mode: Closed Loop - RPM	Spinner Stop: Zero Speed Only
Password Setting: Disabled	Alarm Speed: 55 kph	Operator Access: Mat'l & Gate

**Sensors & Valves**

	Conveyor Motor	Spinner Motor	Pre-Wet Motor
Dither	100 Hz	100 Hz	100 Hz
Pulses/Rev	50	50	50
Min Output	7.6 %	7.6 %	7.6 %
Max Output	60.6 %	60.6 %	60.6 %
Fwd Gain	10.0 %	Not Applicable	Not Applicable
Max RPM	300 RPM	300 RPM	300 RPM

Ground Spd Sensor: 20,000 Pulses/Km Temperature Mode: Disabled

**Material Setup**

Name/Description	Switch Positions			Application Rate (Kilograms/Kilometer)					Blast	Gate	Wet/Rev	Pre-Wet Reduction	
	1	2	3	1	2	3	4	5					
SAND	30	60	90	120	150	180	210	240	270	270	5	1.00	10 %
SALT	30	60	90	120	150	180	210	240	270	270	5	1.00	10 %
MATRL3	30	60	90	120	150	180	210	240	270	270	5	1.00	10 %
MATRL4	30	60	90	120	150	180	210	240	270	270	5	1.00	10 %

Name/Description	Switch Positions			Application Rate (Litres/Tonne)					Wet/Rev	
	1	2	3	1	2	3	4	5		
CALCUM	30	20	30	40	50	60	70	80	90	5,000 Pulses/Liter
BRINE1	30	20	30	40	50	60	70	80	90	5,000 Pulses/Liter
LIQD03	30	20	30	40	50	60	70	80	90	5,000 Pulses/Liter
LIQD04	30	20	30	40	50	60	70	80	90	5,000 Pulses/Liter

1 of 1 1 of 1 Total 100%

## 8 View Truck Log and Generate Reports with the Desktop Software

1. Click 'Report Button' on the top menu bar.
2. Select 'Region', 'Truck', and 'Driver ID' to view activity report by either Truck or Date.
3. Check 'All Events' with Pause & unload or 'Only Spreading Events', and Click 'View Report' button.

**Compu-Spread Controller Configuration Tool**

Save ReLoad Options Records Display Reports

DEFAULT TRUCK

System Sensors & Valves Solid Material Pre-Wet Liquid **Error Config**

**Report Designer**

**Truck Parameters**

Region: All Regions View Report

Truck: All Trucks Email Report

**Truck Log Reports**

Region: All Regions By: Truck From: All Dates

Truck: All Trucks To: All Dates

Driver ID:  All Drivers  000002

All Events  Only Spreading Events

View Report Email Report

Change Printer Report File Clean up Close

**Compu-Spread Report**

**Compu-Spread** (Date = 11/6/02 to 11/7/02 - Units = METRIC) Do 13/002

**Logging by Truck for : REGIONNM**

Date	Time	Event Type	Matl	Solid Rate (gpm)	PreWet Matl (qt/ton)	PreWet Rate (qt/ton)	Total Time (min:sec)	Blast Time (min:sec)	Pause Time (min:sec)	Total Out (cu ft)	Blast Out (cu ft)	Pause Out (cu ft)	Total Solid (gpm)	Blast Solid (gpm)	Pause Solid (gpm)	Total PreWet (qt)	Spin Rate (RPM)	Str. Mode	Data Error (gpm)	Temp (deg F)	
Truck ID : TRUCK-ID Driver ID : 000002																					
11/7/02	15:28:42	STAT	SALT-	0	LICUD1	0	0:39:22	0:00	0:00	2240	0:00	0:00	0	0/R	0:00	0:00	0:00	0:00	OLP	5/3	96
11/7/02	09:35:11	STAT	SALT-	0	LICUD1	0	1:17:18	0:00	0:00	2:55	0:00	0:00	0	0/R	0:00	0:00	0:00	0:00	OLP	5/3	96
11/7/02	09:32:39	STAT	SALT-	100	LICUD1	30	0:0:5	0:00	0:00	0:04	0:00	0:00	3	0/R	0:00	0:00	0:00	0:00	OLP	5/3	96
11/7/02	09:33:30	STAT	SALT-	100	LICUD1	90	0:0:10	0:00	0:00	0:06	0:00	0:00	3	0/R	0:00	0:00	0:00	0:00	OLP	5/3	96
Subtotal for Driver : 000002							1:56:55	0:00	0:00	25:05	0:00	0:00	0	0/R	0:00	0:00	0:00				
Subtotal for Truck : TRUCK-ID							1:56:55	0:00	0:00	25:05	0:00	0:00	0	0/R	0:00	0:00	0:00				
Total for Region : REGIONNM							1:56:55	0:00	0:00	25:05	0:00	0:00	0	0/R	0:00	0:00	0:00				

1 of 1 Cancel Close 4 of 4 Total 4 100%



**Note:**

STAT - Distance/Solid/Liquid Register Overflow  
INIT - event into a "logging" state  
INIT - event into a PROGRAM state  
RATE - ARS Rate change  
RATE - Liquid Rate change  
GATE - Gate change in Read-Back mode  
6HRS - Time change 6 hours  
DEIC - Deice-simulate OFF  
DEIC - Deice-simulate ON  
ERR - Error event  
CTRL - conveyor SEVERITY\_OLP  
CTRL - conveyor SEVERITY\_MANUAL  
RATE - ARS change refresh by GS  
GATE - gate change by operator  
MATL - solid change by operator  
MATL - liquid change by operator  
GSLP - gate/sol/liq change leaving PROGRAM mode  
CTUP - ctrl/units change leaving PROGRAM mode

## 9 Frequently Asked Questions (FAQs)

### 1. Files are missing during the installation process. Are files missing on the CD?

Typically it happens when there is older version software already installed in the computer. To correct the problem you need to remove the older version first and then install the new one.

### 2. Does the software support PDAs that are not listed?

Typically the software work on PDAs running Palm OS3.5, OS4.0 and OS4.1. But we strongly recommend that customers use handheld PDAs listed.

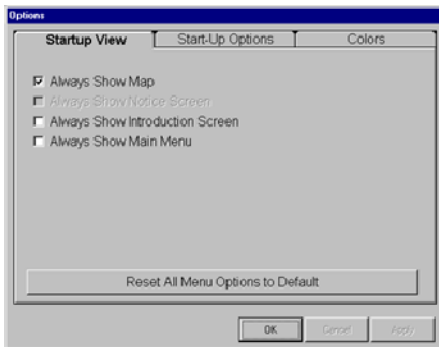
### 3. How to upgrade the desktop software to a newer version?

Before installing the newer version upgrade make sure backup the existing database file, compu.mdb (by default it is in \Program files\Compu-spread Desktop Software). Then you should remove the existing version from \Control Panel\Add or Remove Programs. Once the older version is removed run SETUP.EXE from the newer version CD disk received.

### 4. Though Palm can successfully get both Settings and Truck Log from a CS-440RC Spreader Controller why does not it show up in the Compu-spread Desktop Software?

The interface between Palm and Compu-spread Desktop Database is not set up properly. It can be fixed by doing the following:

- Click 'Reset All Menu Options to Default'
- Click 'Apply' to proceed
- Close the CS-440RC Desktop Software
- Restart the Desktop Software
- Porceed to the main screen
- HotSync your Palm with the PC
- Test if the 'CSTruck' works on The Palm



### 5. How to transfer database from a computer to another computer?

Copy database file, compu.mdb from the application folder (default to \Program Files\Compu-Spread Desktop Software) to the same location on another computer.

Notes: