



# Loadmaster 8000i

## On-Board Weighing System

### Operation

RDS Part No.:	S/DC/500-10-565
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## **Electromagnetic Compatibility (EMC)**



This product complies with Council Directive 2004/108/EC when installed and used in accordance with the relevant instructions.

## **Service and Technical Support**

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Check that the software reference matches that displayed by the instrument.

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**1 OVERVIEW**

1.1 Introduction ..... 5

1.2 System Technical Details ..... 5

1.3 Calibration ..... 5

1.4 Weighing Units ..... 5

1.5 Loading Attachments ..... 5

1.6 The Head Unit ..... 6

1.7 Menu keys ..... 6

1.8 Data Entry..... 6

**2 STARTUP 7**

2.1 Switch On ..... 7

2.2 Zero Prompt ..... 7

2.3 Zero ..... 7

    2.3.1 Dynamic Zero (Dynamic Weighing Mode) ..... 7

    2.3.2 Static Zero (Static Weighing Mode) ..... 8

    2.3.3 Error Messages ..... 8

        (i) Angle of Slope..... 8

2.4 Set Target Load ..... 9

2.5 Set Preset Tare ..... 9

    2.5.1 Cancel Preset Tare..... 9

    2.5.2 Re-weigh function (Tare -1) ..... 9

2.6 Set the Load Enter mode ..... 10

2.7 Set Product Density (Volumetric weighing only) ..... 10

**3 WEIGHING 11**

3.1 Dynamic Weighing ..... 11

3.2 Static Weighing ..... 12

3.3 Error Messages ..... 12

    3.3.1 Angle of Slope (optional) ..... 12

    3.3.2 Sensor Faults ..... 12

    3.3.3 Hydraulic Pressure Surge (optional) ..... 12

    3.3.4 Maximum Weight Exceeded (optional) ..... 12

3.4 Clear Last Entry ..... 13

3.5 Reset for next load ..... 13

<b>4</b>	<b>CUSTOMER AND PRODUCT STORES</b>	<b>14</b>
	Modes of use.....	14
4.1	Store Setup .....	14
4.1.1	Enable/Disable the Stores facility (Customer Mode) .....	14
4.1.2	Enabling the "Reference" facility.....	15
4.1.3	Selecting Batch Mode / Blend Mode .....	15
4.1.4	Setting a Preset Load (Customer Mode only).....	15
4.1.5	Programming a Store Description.....	16
4.1.6	Uploading and Downloading Stores/Batch Data (optional).....	16
4.2	Selecting a Customer / Product Store.....	16
4.3	Connecting a Printer .....	17
4.4	View / Print / Clear a Specific Customer / Product Summary (Customer Mode) .....	17
4.4.1	Reset All Stores (All Modes).....	18
4.5	View / Print / Clear the Grand Total (All Modes).....	18
4.5.1	Overload logging facility (optional) .....	18
4.5.2	View / Print the 7-day Total (All Modes) .....	19
4.6	Selecting the Printer Output Mode.....	19
4.7	Printing the Last Load / All loads (Customer Mode) .....	19
4.8	Batch (Programmable) Mode.....	19
4.8.1	Programming a Batch via the instrument.....	20
4.8.2	Programming a Batch Description .....	20
4.8.3	Selecting and Completing a Batch .....	20
4.8.4	Print the Last Batch Load / All Batch Loads.....	21
4.8.5	View / Print / Clear a Specific Batch Summary .....	21
4.8.6	View / Print / Clear Product Totals when in Batch Mode .....	21
4.9	Batch (Blend) Mode .....	22
4.9.1	Loading in Batch Blend Mode .....	22
4.9.2	Printing in Batch Blend Mode .....	22
4.10	Telemetry.....	22
<b>5</b>	<b>SYSTEM SETTINGS</b>	<b>23</b>
5.1	Adjusting Screen Contrast or Brightness .....	23
5.2	Set Time and Date.....	23
5.3	Switch Tare Facility Off.....	23
5.4	Set Instrument ID.....	24
5.5	Set Language .....	24
5.6	Print Store Names .....	24
5.7	Weighing Units .....	25
	Document History.....	26

## 1.1 Introduction

The LoadMaster 8000i weighing system is installed mainly on Front End Loaders. Two pressure sensors are mounted on each of the hydraulic lift system. They provide an increase of frequency signal as the load increases. The average frequency is captured at a set weighing point provided by the Reference/Direction sensor assembly. Calculated with a factor, the system weighs the contents in the bucket being lifted. This information can then be saved to a certain customer or product memory store.

The system operates in a Non-Approved weighing mode. Dynamic or Static weighing is possible. The system is designed to be easily upgradable for Weights and Measures approved operation, either for automatic weighing (AWI) or non-automatic weighing (NAWI). This requires a Secondary Software Module and several additional sensors.

This instruction manual covers operation in non-approved weighing mode only. For approved weighing, please refer to the Loadmaster 9000i instruction manual.

## 1.2 System Technical Details

- 1000 Stores (a maximum of 500 Customer Stores, the remainder being Product Stores allocated to each customer).
- Product / Customer Data Upload/Download capability)
- Hydraulic Pressure Sensing Technology
- Angle Sensing Technology (optional extra)
- Anti Bounce Inhibition (optional).
- Automatic Dynamic Weighing System with 2 arms
- Static weighing
- ICP and memory card compatible
- Memory Store Upload Facility
- Pre-programmable Batch Mode
- Blend Mode
- Telemetry (optional)

## 1.3 Calibration

Setup and initial calibration is done on installation. There are some user-programmable settings including a "NUDGE" facility to fine-tune the weight calibration as required.

Please refer to the Loadmaster 800i/8000i Calibration manual.

## 1.4 Weighing Units

Metric or imperial units (kgs, tonnes, m<sup>3</sup>, UK tons, US tons, lbs) , and the resolution can be selected via the 'CALIBRATION' menu. If weighing volumetrically (m<sup>3</sup>), you must set the density (section 2.8).

On a Loadmaster 8000, the units are normally displayed on screen and on printouts. If a Loadmaster 9000 Class III approved weighing system is used in non-approved weighing mode (i.e. as a Loadmaster 8000), then units are not displayed on screen or included on a printout in compliance with the requirements for Weights and Measures Approval.

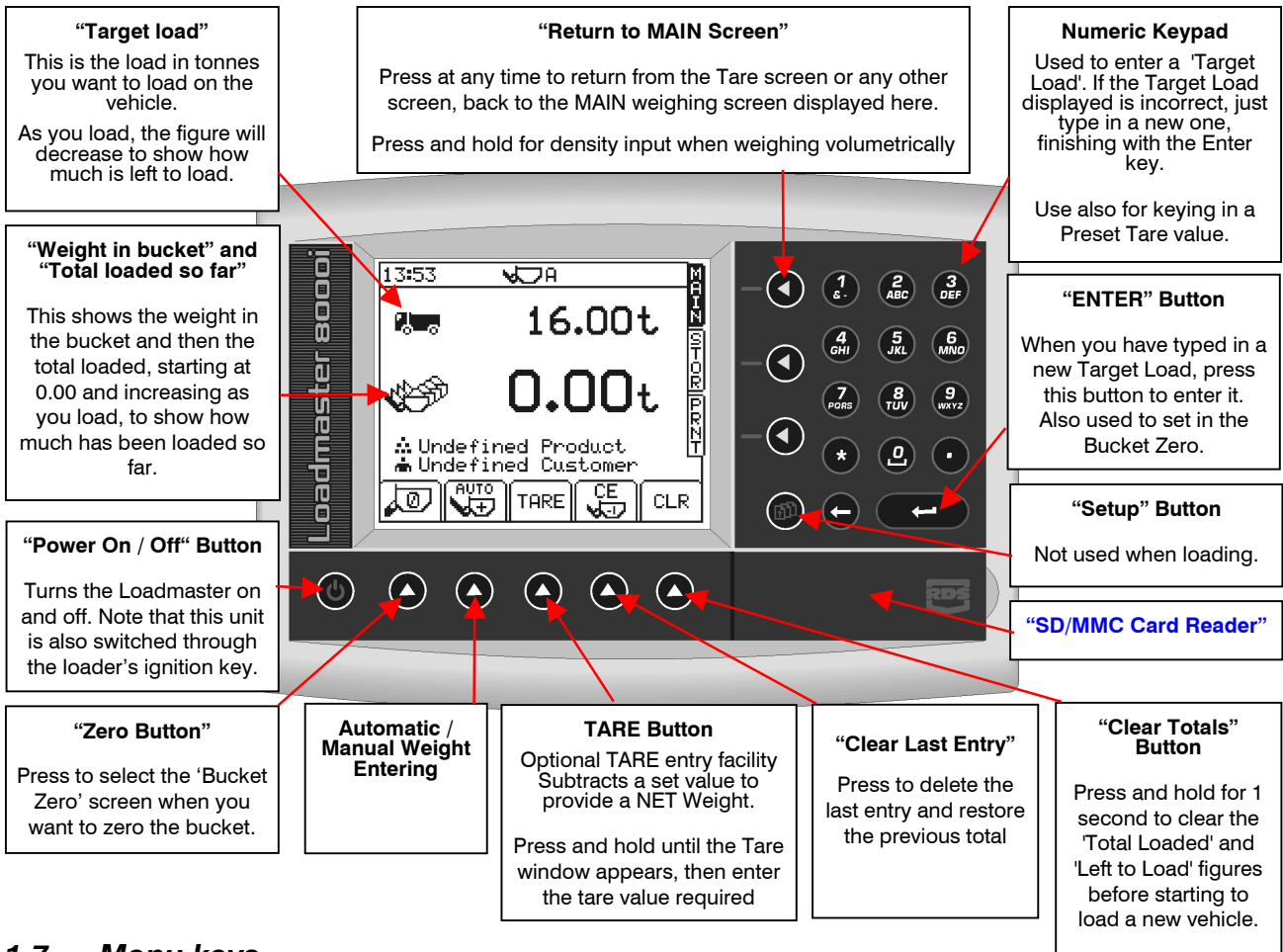
Also, the text "Not for Trade use or Applications under Article 1.2(a)90/384/EEC" will appear on every printout.

## 1.5 Loading Attachments

The system can be calibrated for up to 8 different attachments. By default, only one attachment is enabled. Please refer to the calibration manual if you wish to calibrate for more than one attachment.

## 1.6 The Head Unit

Figure 2



## 1.7 Menu keys


All instrument functions are accessed by nine menu keys adjacent to the LCD display.


The four menu keys to the right of the screen (figure 2) access the primary screen pages (those viewed during normal operation). There are three primary screens MAIN, STOR and PRNT for normal operating functions, and a SETUP screen for calibration functions.


The five sub-menu keys below the screen control the various display functions and settings for each of the primary screen pages. Text or icons are displayed adjacent to the sub-menu keys to denote their function.


## 1.8 Data Entry

Alpha-numeric values are entered via the right-hand keypad. You must press the key from 2 to 5 times to select the required letter. (Some keys have additional special characters not shown on the key legend).

The  key will either toggle between lower and upper case characters or when preceeding a numerical entry, will set a MINUS value.

The  key will toggle between 0 and a SPACE.

The  key will BACKSPACE the screen cursor if you need to re-enter a character.


The  key is the RETURN key and is normally pressed to confirm the data entry into memory.

## 2 Startup

Before you start to load you need to check a few things,

- Work the hydraulics to get up to normal operating temperature.
- Set Zero Weight
- Set the Target load.
- Set Preset Tare (if required)
- Set Load Enter Mode
- Set the Customer and/or Product Store to which totals will be recorded (section 4).

### 2.1 Switch On


Press the  button to switch the unit on. The software version is displayed on the opening screen.


### 2.2 Zero Prompt

**NOTE:** The "CHECK ZERO" function is optional, and is enabled / disabled via the "Calibration" menu. It therefore may not appear on the instrument, depending on the particular installation.

The "CHECK ZERO" screen occurs if the system has been switched off or has not recognised any lifts for more than 15 minutes. Three beeps occur and are repeated every 60 seconds thereafter when in this state.

Lift and lower the empty bucket 3 times. "**Lift & Lower 3 Times**" is prompted, with the number shown, and decrements one number after each lift has been achieved.


When the third lift has been completed, press the  button and the screen automatically moves to either the "Static Zero" screen or the "Dynamic Zero" screen depending on the instrument setup (see note in section 2.4 below). Follow the screen prompts for the dynamic/static zero procedure.

The  symbol denotes that this is the first dynamic/static zero after switch-on. **After the first 10 minutes from switch on**, when the first "CLR" is performed, the "CHECK ZERO" routine must be repeated, and again after another 10 minute period has passed. After that, the routine should occur every 30 minutes.

### 2.3 Zero

**NOTE:** Depending on the particular installation, the instrument is setup from the "Calibration" menu to operate either in dynamic weighing mode or static weighing mode only, or in both modes). This will affect which of the dynamic zero or static zero screens are displayed.

#### 2.3.1 Dynamic Zero (Dynamic Weighing Mode)

Pressing the  key displays the "Dynamic Zero" screen when dynamic weighing is selected in AWI mode (fig. 8).

Lift the empty bucket at normal lift speed\*. The instrument will zero automatically (fig. 9) before returning to the MAIN operating screen.

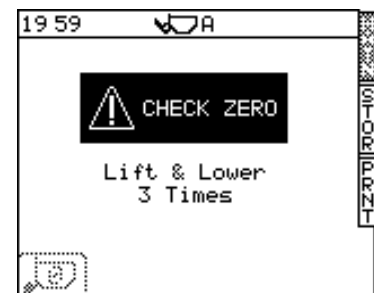


Figure 6



Figure 7



Figure 8

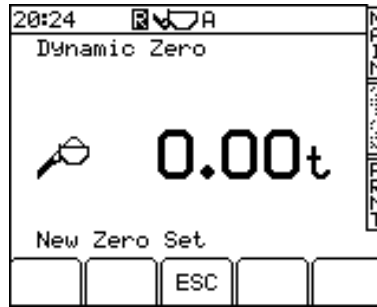




Figure 9

The  symbol denotes that this is a zero done during normal operation.

NOTE: If the "live last bucket" is used, the dynamic zero will be followed by the static zero (as described below).

### 2.3.2 Static Zero (Static Weighing Mode)

Pressing the  key displays the "Static Zero" screen (fig. 10) when static weighing mode or auto-static weigh mode is enabled.

Raise the bucket to the reference position. The loader kickout operates, stopping the lift. A short delay will occur as a weight reading is taken (fig. 11). The instrument will then sound a single bleep and zero automatically before returning to the MAIN operating screen.

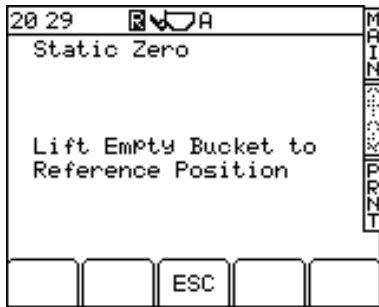


Figure 10

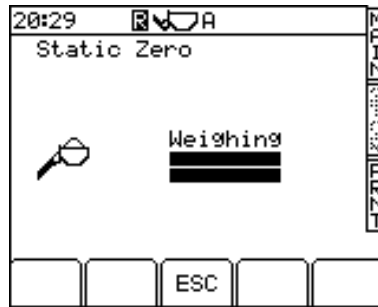


Figure 11

### 2.3.3 Error Messages

#### (i) Angle of Slope

NOTE: This function is active only if the system is installed with the optional angle sensor.



This indicates that the angle of slope is too great in a particular direction - move to a more level area.



## 2.4 Set Target Load

This is the weight you want to load on the vehicle (fig. 13).

From the MAIN screen, simply key-in the target weight and then press the ENTER key to confirm. As you commence the loading cycle, the figure will decrease to show how much is left to load.

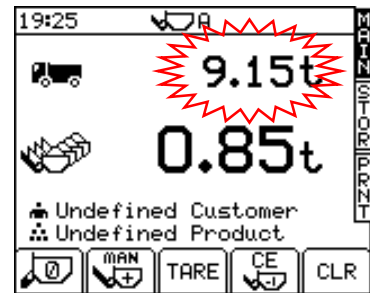


Figure 13

## 2.5 Set Preset Tare

This facility is used to display the NET weight of a product within a lifted container. The normal gross weight is taken, from which the pre-programmed empty weight of the container is automatically subtracted.

From the MAIN screen, press and hold the TARE key (fig. 14). Key-in the empty container weight and press ENTER to confirm.

The Preset Tare (PT) is then displayed on the MAIN screen (fig 15a). With a tare set, each bucket weight is displayed with the **NET** symbol above it (fig. 15a) and any printout will be identified with the letters "NET"

The Tare facility may be switched off from the SYSTEM SETTINGS menu in which case the TARE key will no longer appear on the screen.

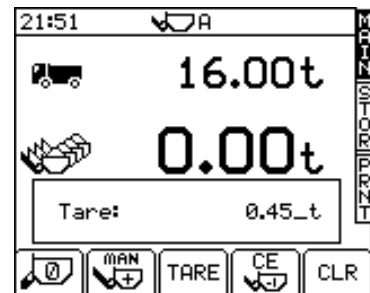


Figure 14

### 2.5.1 Cancel Preset Tare

To CANCEL a preset tare, simply press and hold the TARE key again, then release. After a few seconds the "Tare" window will disappear, cancelling the preset tare setting.

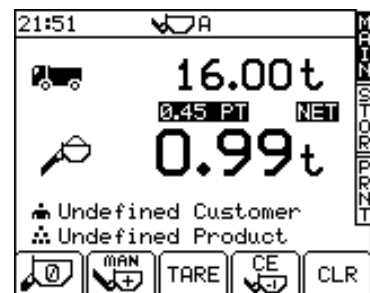


Figure 15a

### 2.5.2 Re-weigh function (Tare -1)

The loader operator may wish to tip a partial amount off the last bucket load to "top-off" the truck load. The "re-weigh" function enables the weight of this surplus material to be subtracted from the truck total, ensuring the recorded total matches the actual weight loaded into the truck.

The re-weigh function must be enabled from the SETUP menu (ref. section 5.3).

1. Lower the bucket load with the remaining material.
2. Press the "Tare -1" key (fig.15b).
3. Lift to re-weigh and then press ENTER. The remaining material weight is then subtracted from the total.

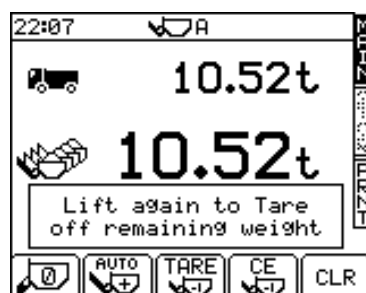


Figure 15b

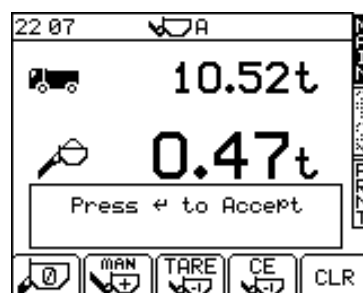


Figure 15c

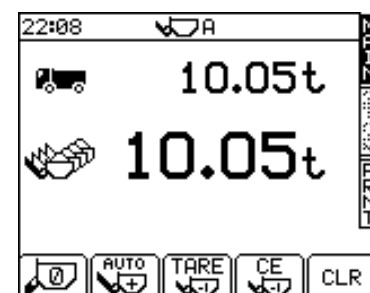




Figure 15d

## 2.6 Set the Load Enter mode

The Load Enter mode should normally be set to . The load will be automatically entered as the bucket is lifted above the weighing position.

Alternatively, if you prefer to manually enter the bucket weight on every lift, then hold the SUB MENU key to select .

## 2.7 Set Product Density (Volumetric weighing only)

If you are weighing in cubic metres ( $m^3$ ), then you must set the density (kg/litre = tonnes/ $m^3$ ) for the material you are loading.

The density is displayed on the MAIN screen (fig. 15e).

To change the setting, press and hold the MAIN key for several seconds until the density window pops up.

Simply key-in the correct density and press ENTER.

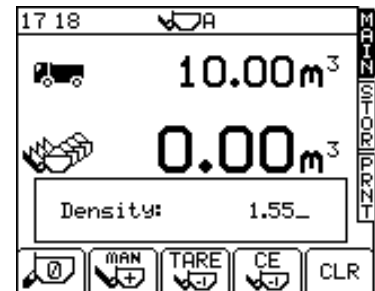


Figure 15e



### 3 Weighing



The system also has several compensatory features allowing for varying lift speed, weighing 'on the move', and (if an optional angle sensor is fitted) weighing on a slope, to maintain accuracy. Even with these features however, smooth lifting with the loader stationary will always ensure the best results.

#### 3.1 Dynamic Weighing


With dynamic weighing, the load is lifted without any interruption. Weighing can be fully automatic and quick, and weighing 'on the move' is possible.

Fill the bucket as normal and crowd it right back. Hold the lift lever back. Lift the bucket smoothly at a constant speed through the reference position, keeping the loader as steady as possible while the weight is taken.


If the display shows   this indicates that the lift speed was too slow - try again.


If the display shows   this indicates that the lift speed was too fast - try again.

Avoid excessive bounce if weighing on the move. The system can compensate for vehicle movement within certain limits. Anti-bounce inhibition is optional and is enabled / disabled from the "Calibration" menu. When enabled, a warning will be displayed and weighing is inhibited.

The bucket weight  is then displayed (fig. 17) and if AUTO ENTER is set (as shown), the weight is automatically stored in memory.

If MANUAL ENTER is set, then PRESS the LOAD ENTER BUTTON to store the weight reading in memory.

The target weight  will decrease by the bucket weight to show how much is left to load (fig. 18).

The  figure then indicates the total of all bucket weights entered so far. Continue loading until you get to the last bucketful. The instrument then switches automatically to "last bucket" static weighing mode. When the target weight is reached or surpassed, the bucket weight display will flash and the display will give a "live" readout.

You can tip off a little as required. Allow the live display to settle down before pressing the REMOTE ENTER BUTTON to confirm the weight entry.

**NOTE:** AUTO ENTER mode does not function for "last bucket" static weighing.

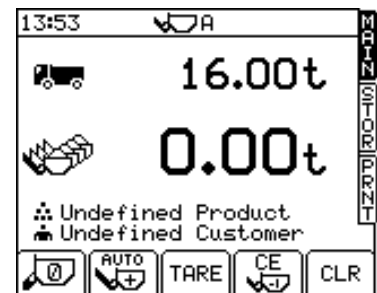


Figure 16

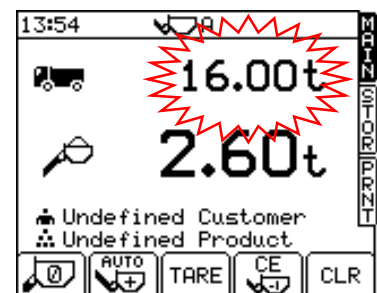


Figure 17

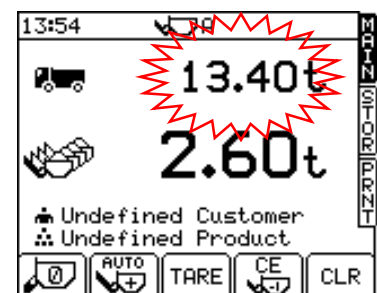


Figure 18

### 3.2 Static Weighing


This normally uses the loader's auto-kickout system to automatically stop the lift arms in the reference position, before sampling the weight.

The weighing screen (fig. 19) will appear the same as for dynamic weighing mode.

Fill the bucket as normal and crowd it right back. Pull the lift lever back to it's held position. As the loader reverses the bucket will come up to the weighing point and the lift lever kickout will operate automatically.

**NOTE:** *Best accuracy is achieved with the vehicle stationary. If configured to do so, the instrument will display a warning if excessive movement occurs, and weighing will be inhibited.*

Keep the loader as steady as possible while the weight is taken.

The display will show two 'bars', which fill up, indicating that the weight is being sampled (fig. 20) and the bucket weight  is then displayed.

If AUTO ENTER is set, the weight is automatically stored in memory as you continue lifting the bucket above the reference position. If MANUAL ENTER is set, then PRESS the LOAD ENTER BUTTON to store the weight reading in memory.

As with dynamic weighing, when the bucket weight is entered, the target weight figure will decrease by that amount.

Continue loading until you get to the last bucketful. The instrument then switches automatically to "last bucket" static weighing mode. When the target weight is reached or surpassed, the bucket weight display will flash and the display will give a "live" display.

You can tip off a little as required. Allow the live display to settle down before pressing the REMOTE ENTER BUTTON to confirm the weight entry.

**NOTE:** *AUTO ENTER mode does not function for "last bucket" static weighing.*

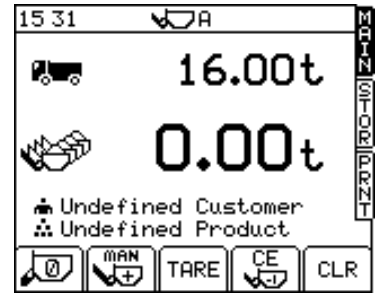


Figure 19

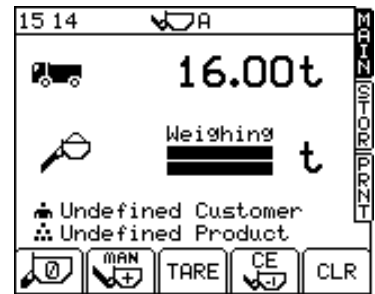


Figure 20

### 3.3 Error Messages

#### 3.3.1 Angle of Slope (optional)



This indicates that the angle of slope is too great in a particular direction - move to a more level area.


#### 3.3.2 Sensor Faults

The instrument also warns you if there is a sensor fault and inhibits the zero routine.


#### 3.3.3 Hydraulic Pressure Surge (optional)

Caused by excessive bouncing of the loader whilst weighing. The screen prompts "To Much Bounce - Lift Again" .

#### 3.3.4 Maximum Weight Exceeded (optional)

 flashes on-screen with a 3-second continuous beep when the maximum weight limit is exceeded. Weighing is inhibited.


### 3.4 Clear Last Entry

If the last bucket weight was entered in error, then press the  key to delete it.

**NOTE:** *When using the instrument in the 'Blend Mode' (section 4.9), each bucket weight is added straightaway to the Product, Batch, Grand Total and 7-day Stores straight away, as opposed to when the CLR button is pressed. In this case, clearing the last entry also removes the bucket weight from these store totals.*

Only the last entry can be cleared.

### 3.5 Reset for next load

Press the  key.

or

press and hold the LOAD ENTER BUTTON for 5 bleeps.



The load record is then stored to the pre-selected product / customer stores.

If the printer mode is set to 'REC' (Record) or 'ROLL' then a printout is produced automatically when the CLR key is pressed.

The instrument resets to the preset target load. If a different target load is needed for the next load, simply key-in the new value for the target load and press the ENTER key.

**NOTE:** *The printer output mode 'OFF', 'ROLL' or 'REC' is selected from the PRNT screen.*

## 4 Customer and Product Stores

There is a "pool" of 1000 individual memory stores available. Of these, up to 500 can be programmed as Customer Stores (  ). The remaining stores in the "pool" are available as Product Stores (  ) allocated to each Customer Store. There is no limit on the number of Product Stores allocated to any one customer. You could for example, have 100 Product Stores for one Customer Store, however, there will then be fewer Product Stores in the "pool" for other Customer Stores.

Basically, if you have programmed fewer Customer Stores, you can allocate a greater number of Product Stores to each, and vice versa. The selected store(s) appear on the MAIN operating screen (fig. 23).

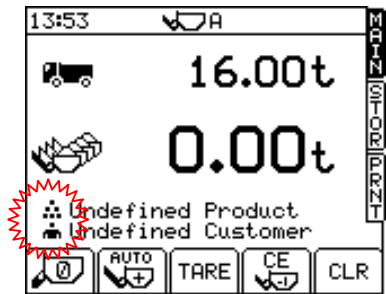


Figure 23

### Modes of use

The stores facility can be set up for use in any one of three different ways:-

(i) **Customer mode:**

A specific Product Store and Customer Store is manually selected from the STOR screen. The weight reading accumulates to these stores.

(ii) **Batch (Programmable) Mode:**

The instrument can have stored in memory, up to 50 individual batches - each being a menu of up to 8 products and their preset target weights which make up a "recipe". The operator selects the batch number/name and the MAIN screen indicates the next product and target weight required. When the last product in the batch has been loaded, "Complete" is displayed. The operator can then select the next batch number/name after pressing the CLR button.

(iii) **Batch (Blend) Mode:**

This works very similarly to the batch (programmable) mode, except that a batch does not have a preset "recipe". The operator selects the batch number/name as before but then manually selects the product store. When the required weight of that product has been loaded, the operator quickly and easily selects another product store from the MAIN screen. The "target weight" display becomes a running total for that batch.

The store mode is set from the STORE SETUP screen (section 4.1.3).

### 4.1 Store Setup

The Customer Store facility and the Product Store facility only appear on the MAIN screen if they are enabled from the STORE SETUP screen.

#### 4.1.1 Enable/Disable the Stores facility (Customer Mode)



1. From the SETUP screen, press "2. Stores Data" to display the STORE SETUP screen (fig. 24).
2. Select "1. Product" or "2. Customer" and press the  key to switch the respective store mode on or off.
3. Press the MAIN key to return to the operating screen.



Figure 24

### 4.1.2 Enabling the "Reference" facility

In the Customer store mode you can enter up to three ancillary references (e.g. vehicle number, customer order reference etc.). Each time you select a customer / product store, only Reference 1 (  ) will appear on the MAIN screen. All references that are enabled will appear on the printout.

You will be prompted to enter / confirm each ancillary reference each time you select a customer/product store prior to loading.

Switch this facility on from the STORE SETUP screen (fig. 24).

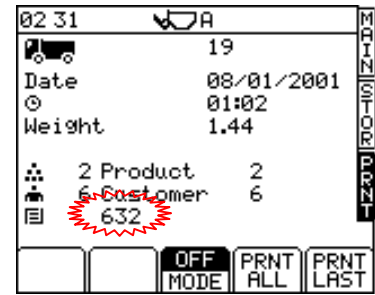




Figure 25

### 4.1.3 Selecting Batch Mode / Blend Mode

1. From the SETUP screen, press "2. Stores Data" to display the STORE SETUP screen.
2. Select "2. Customer" and press the  key to toggle between "Batch (program)" (fig. 26), and "Batch (blend)" (fig. 27).
3. Press the  key to switch the respective store mode on or off.

NOTE: The "Reference" facility is enabled only in the Customer store mode.

4. Press the MAIN key to return to the operating screen.



Figure 26 Select Batch Mode



Figure 27 Select Blend mode

### 4.1.4 Setting a Preset Load (Customer Mode only)

You can set a "Preset Load" (the default target load) for customer stores and product stores. This sets the default target weight that appears when you press CLR at the end of the loading cycle.

The setting for the customer store will take priority unless the customer store is set to "0", or the customer store facility is switched "Off". In that case, the setting for the product store will take effect.

1. From the SETUP screen, press "2. Stores Data", to display the STORE SETUP screen (fig. 24).
2. Select either "1. Product" or "2. Customer" and press ENTER to display the PRODUCT SETUP or CUSTOMER SETUP screen (fig. 28).
3. Key-in the preset load and press ENTER.
4. Press the MAIN key to return to the operating screen.



Figure 28

### 4.1.5 Programming a Store Description

1. From the SETUP screen, press "2. Stores Data", to display the STORE SETUP screen (fig. 24).
2. Select either "1. Product" or "2. Customer" and press ENTER to display the PRODUCT SETUP or CUSTOMER SETUP screen (fig. 29).
3. Position the cursor under the first letter of the "Product" or "Customer" line, and key-in the description.
4. Press the MAIN key to return to the Operating screen.

NOTE: "Reference" (fig. 29): This is the store number allocated for that product (or customer), for quick store selection and database use.

"Position # of 200" (fig. 29): This is the position of the product/customer store in the product/customer list. This position will change for any set product/customer store depending on the weight totalled to that store, or the last store text entry.



Figure 29

### 4.1.6 Uploading and Downloading Stores/Batch Data (optional)

You can upload Product / Customer Data (fig. 28) for any or all of the stores, or Batch data, via the RDS Data Card Module. Similarly, you can also download stores/Batch data for your office records. Data is created in a Microsoft Excel™ spreadsheet, and is exported / imported in .CSV format.

### 4.2 Selecting a Customer / Product Store

Depending on the nature of the loading activities, the instrument can be configured to automatically reset to either the previous Customer/Product or "Undefined Customer"/"Undefined Product", each time you press CLR to complete the load. This depends on the setting "6. Reset to Undef." (fig. 24).

To change the store settings ready for another load:-

1. Press STOR to display the SELECT CUSTOMER screen (fig. 30a).

The store at the top of the screen is the last store used. Pressing the ENTER key after selecting the SELECT CUSTOMER page "quick selects" the last-used store. The rest of the stores are listed automatically in order of tonnes stored, with the high tonnage stores at the top.

2. Select the "Customer" Store either by:-
  - (i) scrolling down the list using the arrow keys.
  - (ii) entering the store number using the alpha-numeric keys.
  - (iii) pressing the SEARCH key ( [icon] ). Enter the first letter or more of the Customer description, press ENTER and the screen will list all customers beginning with those letters.

This function can also be used to add new "casual" customer names. If the letters do not match any name in the listings, press the ENTER key. The next available reference will be allocated to that name shown on the screen. The screen prompts "Creating Reference xxx", then "Data Saved".

3. Press ENTER to confirm the selection. The SELECT PRODUCT screen is then displayed. Select the Product Store in the same way.
4. If the "Reference" facility has been enabled (section 4.1.2), then enter a new reference (or press ENTER to confirm the existing reference) when prompted by the instrument (fig. 30b)



Figure 30a

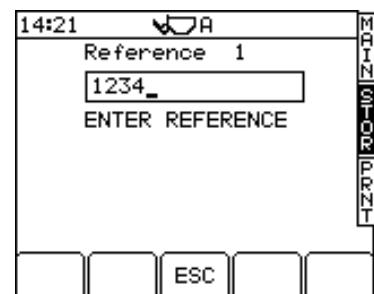


Figure 30b



### 4.3 Connecting a Printer

The top port is factory set for connecting an RDS ICP printer, without further configuration being necessary. If another printer is used (or you want to select an option other than a printer), you can configure the settings from the 'SETUP' menu (ref. the Calibration manual).

Port Output Mode	Port function
'Text'	Printer
'Data'	Direct cable link to PC
'Card'	Top Port :- External Data Card Module Bottom Port:- No external function – enables the internal SD Data Card Module
'Radio'	Telemetry via radio
'GSM'	Telemetry via mobile phone
'Screen'	(For RDS use only)

### 4.4 View / Print / Clear a Specific Customer / Product Summary (Customer Mode)

You can view, print or clear a summary:-

- (i) for a selected customer, the no. of loads and amount of each product stored to the selected customer (fig. 31).
- (ii) for a selected product, the no. of loads and amount to each customer.

From either the SELECT CUSTOMER or SELECT PRODUCT screen, press MEM (fig. 30).

Press PRNT to print a summary of the Product / Customer Store (figs 32, 33).

Press CLR to clear the totals.

**NOTE:** If the "reference" facility is enabled (default = Off), the ancillary reference(s) will also appear on the printouts.

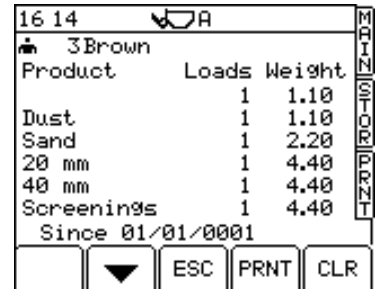


Figure 31

```

-----
RDS LM8000
Product Summary
-----
Totals Since 01/01/2001

Product (4):
Product      4

Customer (0):
Undefined Customer
Loads       1
Weight     1.10

Customer (3):
Customer     3
Loads       1
Weight     4.40

Customer (1):
Customer     1
Loads       2
Weight     8.80
    
```

```

-----
RDS LM8000
Customer Summary
-----
Totals Since 01/01/2001

Customer (3):
Customer     3

Product (0):
Undefined Product
Loads       1
Weight     1.10

Product (1):
Product      1
Loads       1
Weight     1.10

Product (2):
Product      2
Loads       1
Weight     2.20
    
```

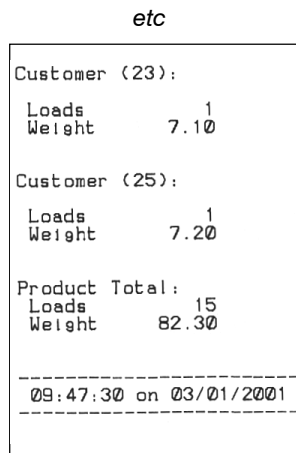


Figure 32

Product Summary (Customer Mode)

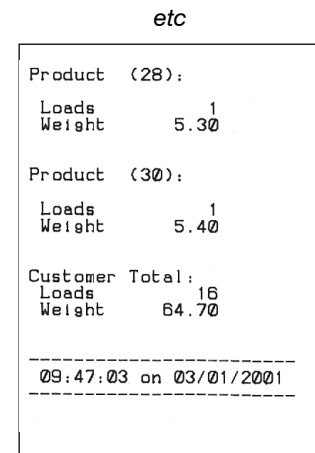


Figure 33

Customer Summary

**4.4.1 Reset All Stores (All Modes)**

**NOTE:** Be absolutely sure that any customer / product information you wish to keep a record of, has in fact been saved, either on printouts or onto a Data Card !

Press the STOR key twice.

From the "Clear Stores" line (fig. 34), press ENTER. Press ENTER again to confirm the reset. All Product and Customer Stores will be cleared.

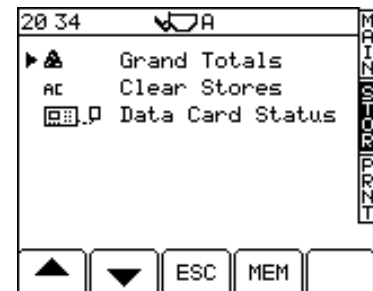


Figure 34

**4.5 View / Print / Clear the Grand Total (All Modes)**

Press the STOR key twice.

From the "Grand Totals" line (fig. 34), press MEM to view the grand total number of loads and amount recorded since the date displayed (fig. 35).

Press PRNT (fig. 35) to print a (Grand) Total Summary (fig. 36).

Press CLR (fig. 35) to clear the Grand Total.

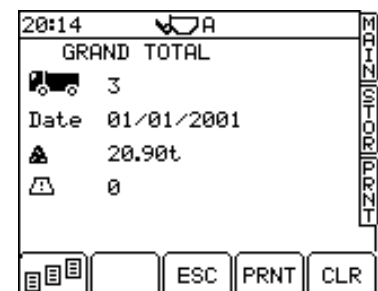



Figure 35

**4.5.1 Overload logging facility (optional)**

The instrument can log any weight entered over and above the target weight. This facility is enabled/disabled from the "System Settings" » "Weighing Units" menu.

The accumulated overload weight (  ) is displayed on the GRAND TOTAL page (fig. 35). It is reset when you press the CLR button.

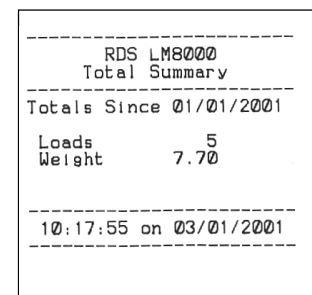



Figure 36

### 4.5.2 View / Print the 7-day Total (All Modes)

Press the  key (fig 35) to view the daily totals of the last seven days.


Press PRNT to print the 7-day total summary (fig. 37).


RDS LM8000 7 Day Total Summary		
Date	Loads	Weight
03/01/01	5	7.70
10:18:09 on 03/01/2001		


Figure 37

### 4.6 Selecting the Printer Output Mode

By default, the print mode is OFF.

Select the PRNT screen and set the print mode using the  key (fig. 39a).

 A Job Record is printed out (fig. 38a) when you press CLR to reset for the next load.

 A job record including space for the customer name address and signature is printed out (fig. 38b).

**NOTE:** If the "Bucket List" function is switched on via the "Output Port Setup" menu, a list of all bucket lifts is printed on the ticket (only when in "Customer" mode).

RDS LM8000 Job Record	
Job Number	2
Date	03/01/2001
Time	09:49
Load	2.00
Product (0): Undefined Product	
Customer (0): Undefined Customer	
Reference: Undefined	
-----	
Job Number	3
Date	03/01/2001
Time	09:50
Load	1.00
Product (0): Undefined Product	
Customer (0): Undefined Customer	
Reference: Undefined	

Figure 38a

Job (REC) Record

RDS LM8000 Job Record	
Job Number	1
Date	03/01/2001
Time	09:48
Load	2.00
Product (0): Undefined Product	
Customer (0): Undefined Customer	
Reference: Undefined	
Name:	
Address:	
Sign:	
-----	
09:49:00 on 03/01/2001	

Figure 38b

ROLL Record

### 4.7 Printing the Last Load / All loads (Customer Mode)

Press "PRNT LAST" to print out the last load record.

Press "PRINT ALL" to print out a summary of all loads recorded to all customers since the stores totals were last reset ("AC Clear Stores" function - fig. 34). The print out does not list customer /product stores with a zero total. However, you might still end up with a very long piece of paper !

Printing the same load a second time will produce the same information again. A secondary print is marked by the words "duplicate copy". The first copy is generally used for the customer receipt. Any further "duplicate copies" are kept for data records (ICP 200 printer only).









19 39	U A	
	2	
Date	01/01/2001	
	19:38	
Weight	4.00	
	0 Undefined Product	
	0 Undefined Customer	
	Undefined	
		

Figure 39a

### 4.8 Batch (Programmable) Mode

The instrument can have stored in memory, up to 50 individual batches - each being a menu of up to 8 products and their preset target weights which make up a "recipe".

Refer to section 4.1.3 to switch the instrument to Batch Mode.

### 4.8.1 Programming a Batch via the instrument

Using the RDS Upload/Download kit, You can upload batch data (section 4.1.6), however, without this optional equipment, programming batch data is done manually on the instrument as follows;

1. From the STORE SETUP page with the "2 Batch (program)" line selected (fig. 26), press the ENTER key to display the BATCH SETUP page (fig. 39b).
2. Select a batch number/name using the left/right arrow keys, then move the cursor down to the line "View Batch" and press ENTER to display the "recipe" page (fig.40).
3. Starting with the first product on the top line, use the left/right arrow keys to select the product.

**NOTE:** The products are programmed from the PRODUCT SETUP menu in the normal way (section 4.1.5).

4. Press ENTER and type in the target weight.
5. Move down to the next line, select the second product and enter the target weight in the same way. Continue for any further products making up the batch.

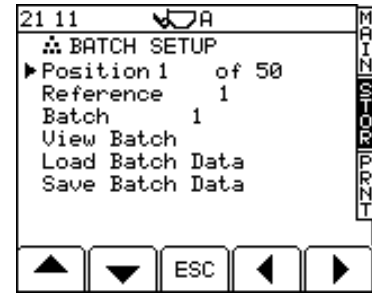


Figure 39b

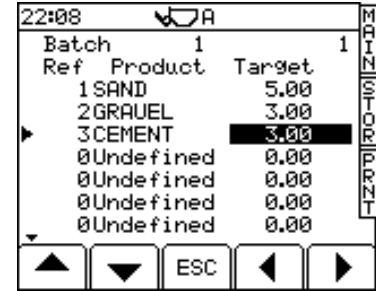


Figure 40

### 4.8.2 Programming a Batch Description

By default, the batch description are simply numbered from "0" (undefined) to "50". To enter your own description:-

1. From the SETUP screen, press "2. Stores Data" to display the STORE SETUP screen (fig. 26).
2. Select "2. Batch (program)" and press ENTER to display the BATCH SETUP (fig. 39).
3. Move the cursor to the line "Batch #" and key-in the description.
4. Press the MAIN key to return to the operating screen.

### 4.8.3 Selecting and Completing a Batch

1. From the MAIN screen, press the STOR button to go to the SELECT BATCH page (fig. 41).

The batch at the top of the screen is the last batch used. Pressing the ENTER key after selecting the SELECT BATCH page "quick selects" the last-used batch. The rest of the batches (50 max.) are listed automatically in order of tonnes stored, with the high tonnage batch stores at the top.


2. Select the batch either by:-
  - (i) scrolling down the list using the arrow keys.
  - (ii) entering the batch number using the alpha-numeric keys.
  - (iii) pressing the SEARCH key (  ). Enter the first letter or more of the Batch description , press ENTER and the screen will list all batches beginning with those letters.
3. Press ENTER to confirm the selection and return to the MAIN operating screen. The batch description, first product in the batch, and the target weight for that product is indicated on the screen (fig. 42). You are then ready to start loading the first product specified in the selected batch.



Figure 41

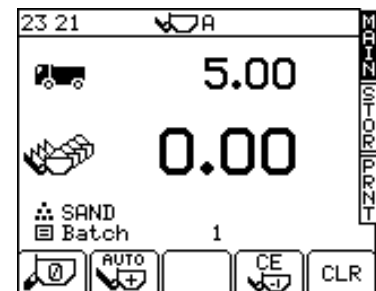


Figure 42

4. Load in the normal way in order to meet the target weight. When you have loaded the desired weight for that product, press the CLR key. The bucket weight display will zero and the target weight is set for the next product in the batch.
5. Continue for all products in the batch. When you have met the target weight for the final product and press CLR, the display will prompt "COMPLETE" (fig. 43). The instrument is reset, ready for you to select the next batch.

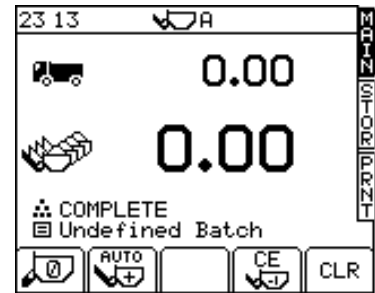


Figure 43

#### 4.8.4 Print the Last Batch Load / All Batch Loads

Just as for the standard store mode, in batch mode, select the PRNT screen to view the summary of the last load (fig. 44).

Press "PRNT LAST" to print a record of the last batch load.

Press "PRNT ALL" to print out a summary of all the batch loads recorded since the stores totals were last reset ("AC Clear Stores" function - fig. 34). The printout will not list batch number/names with a zero total.

NOTE: You can select the printer output mode as required (section 4.6).

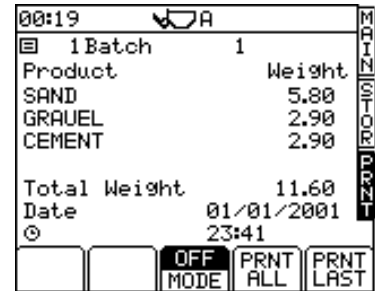


Figure 44

#### 4.8.5 View / Print / Clear a Specific Batch Summary

You can view, print or clear for a selected batch number/name - a summary of the total weight recorded against each product in that batch, and in addition the total number of loads and total weight of all products for that batch number/name.

1. From the MAIN screen, press the STOR button to go to the SELECT BATCH page (fig. 41).
2. Select the batch number/name and then press MEM to view the totals (fig. 45).
3. Press PRNT to print a Total Summary for that batch (fig. 48), or press CLR to clear the totals for that batch.

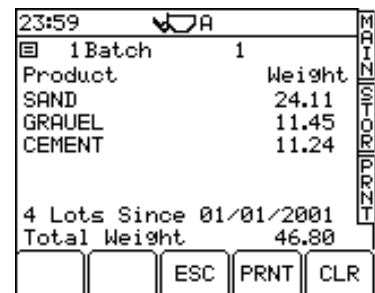


Figure 45

#### 4.8.6 View / Print / Clear Product Totals when in Batch Mode

You can view, print or clear for a selected product - a summary of the number of loads and weight of that product recorded against each batch number/name.

1. Press the STOR key twice.
2. From the "Product Totals" line (fig. 46), press MEM to display the SELECT PRODUCT screen.
3. Select the product either by:-
  - (i) scrolling down the list using the arrow keys.
  - (ii) entering the product number using the alpha-numeric keys.
4. Press MEM to view the product summary (fig. 47).
5. Press PRNT to print a product summary (fig. 49), or press CLR to clear the totals for that product.



Figure 46

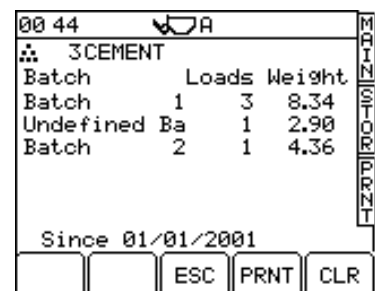


Figure 47

### 4.9 Batch (Blend) Mode

This works very similarly to the batch (Program) mode, except that a batch does not have a preset "recipe".


Refer to section 4.1.3 to switch the instrument to Batch (Blend) mode.

#### 4.9.1 Loading in Batch Blend Mode

1. Select the batch number/name as in Batch (Program) Mode. The batch number/name appears as normal on the MAIN screen.
2. Press any numeric key to display the SELECT PRODUCT page (the numeric keypad no longer sets a target weight).

The product at the top of the screen is the last product set. Pressing the ENTER key after selecting the SELECT PRODUCT page "quick selects" the last-used product. The rest of the products are listed automatically in order of tonnes stored, with the high tonnage product stores at the top.

Select the product either by:-

- (i) scrolling down the list using the arrow keys.
  - (ii) entering the product number using the alpha-numeric keys.
  - (iii) pressing the SEARCH key (  ). Enter the first letter or more of the product description , press ENTER and the screen will list all products beginning with those letters.
3. Press ENTER to confirm the selection and return to the MAIN operating screen. The "Target Weight" display is now a running total for the batch.
  4. When you have finished loading the first product, simply press any numeric key to display the SELECT PRODUCT page, and select the next product store as above. Continue loading each product in this way.
  5. When you have finished loading the last product, press the CLR key to complete the batch, and reset the running total to zero.

**NOTE:** As each bucket weight is entered, it is added to the Product, Batch, Grand Total and 7-day Stores straight away, as opposed to when the CLR button is pressed.

#### 4.9.2 Printing in Batch Blend Mode

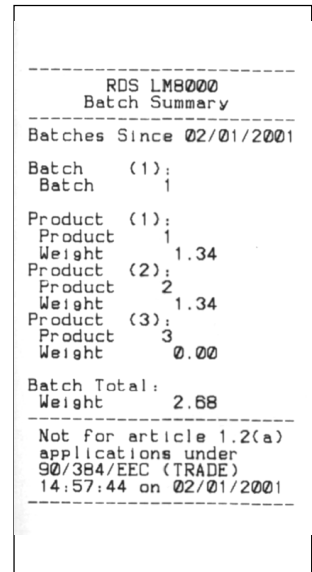
Exactly as for Batch (Program) Mode. If REC or ROLL print mode is set, the last batch (blended load) information is automatically printed out when you press the CLR button.

### 4.10 Telemetry

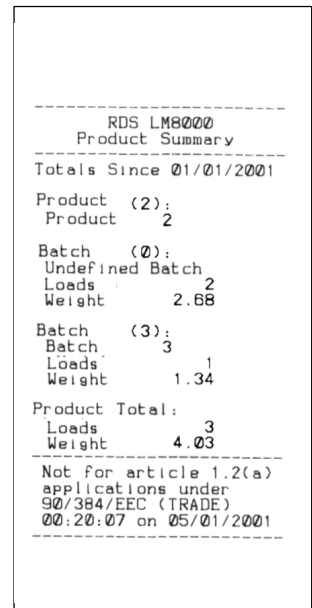
The Loadmaster 8000i is fully compatible for radio telemetry applications in conjunction with Load 2000 Load Management System® software from "CC Software Ltd".

The Loadmaster 8000i can be configured to either simply transmit load information as each load is completed, or have bi-directional communication, receiving order information for designated vehicles from the PC.

For radio telemetry applications please refer to the "Loadmaster Telemetry" instruction manual supplied with the RDS telemetry kit.



**Figure 48**  
**Batch Summary**



**Figure 49**  
**Product (Batch) Summary**

## 5 System Settings

A number of settings can be programmed by the operator from the SETUP menu. These settings are accessible without a PIN number.

**NOTE:** Certain menus including the 'Calibration', 'Printer Setup' and 'Weighing Units' menus are not accessible to the operator.

### 5.1 Adjusting Screen Contrast or Brightness

From the SETUP screen, press;

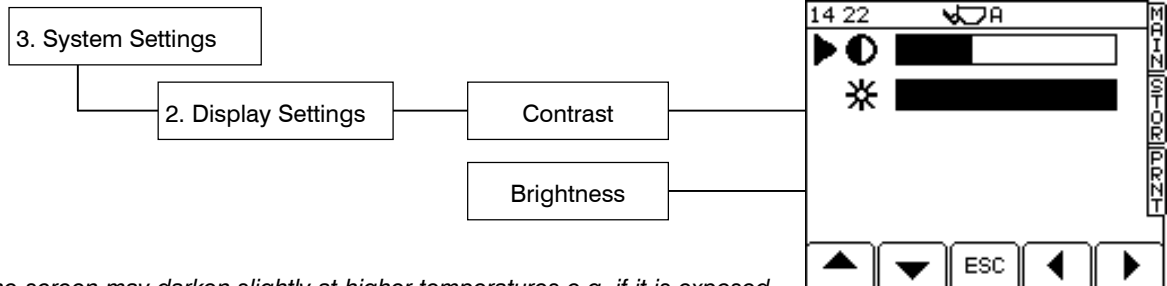
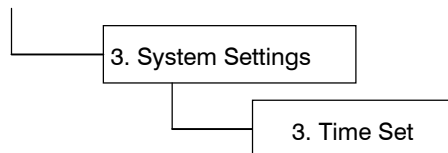


Figure 50

**NOTE:** The screen may darken slightly at higher temperatures e.g. if it is exposed directly to bright sunlight. This is a normal characteristic of this type of display.

### 5.2 Set Time and Date

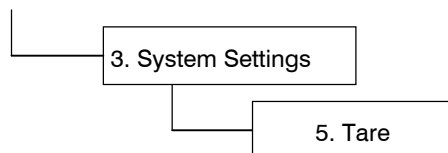
From the SETUP screen, press;



If you need to change a time setting, position the menu pointer against the function, type in the new value and press ENTER.

### 5.3 Switch Tare Facility Off

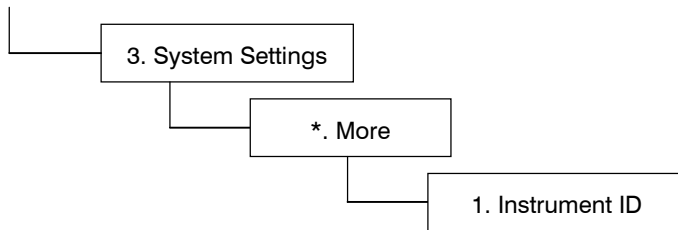
From the SETUP screen, press;



Switch "On", "Off" or "Tare -1" using the left and right arrow keys.

### 5.4 Set Instrument ID

From the SETUP screen, press;



You can reprogramme up to 2 lines of 20 characters, using the alphanumeric keypad.

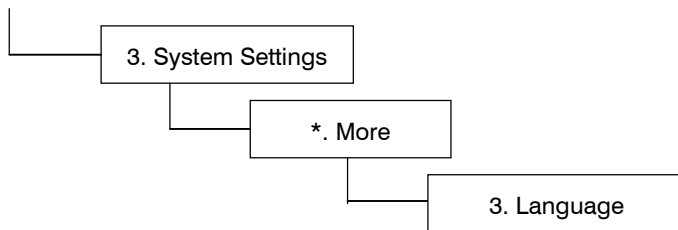
The first line is the information that will appear at the bottom of the roll summary.

The second line (default = "Instrument ID") is the identity used for telemetry.

The third line enables a heading "NON APPROVED MODE" which will appear briefly on the screen any time a button is pressed (default = Off).

### 5.5 Set Language

From the SETUP screen, press;

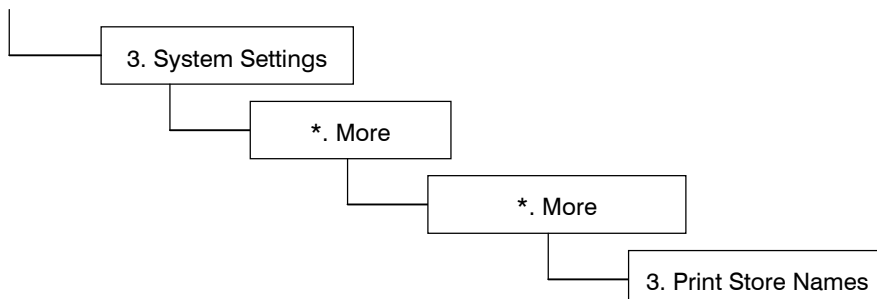


Select the preferred language from the list displayed.

Note that English has three settings:- "UK", "AU" for Australia and "US", to cater for differences in some wording and Time+Date format.

### 5.6 Print Store Names

From the SETUP screen, press;

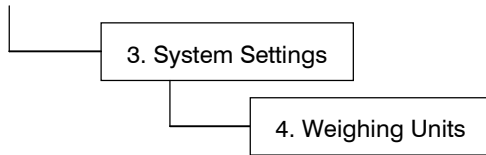


The list of product and customer store names will then be printed out.



## 5.7 Weighing Units

From the SETUP screen, press;



Choose units of either kg, lbs, UK tons, US tons, Metric tonnes, cubic metres or cubic yards.

For lbs or kg units you can also set the resolution i.e. displaying to the nearest 1, 5, 10, 20, 25, 50 or 100 lbs or kgs.

Also, you can set a maximum weight at which the instrument will display a warning on the MAIN screen, and inhibit weighing.

---

**Document History**

Issue 1:	18/7/07	Document revised from UK181-8.DOC
Issue 1.01	13/11/07	Document revised ref. section 4.1.6
Issue 1.02	19/11/07	Minor revisions
Issue 1.03	29/11/07	Correction ref. p.8
Issue 1.04	9/12/07	Addition to figure 2
Issue 1.2	17/1/08	Correction ref. section 4.3