Loadrite L5000 User Manual

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Important safety information

PLEASE READ CAREFULLY BEFORE USING THE LOADRITE™ WEIGHING SYSTEM





It is your sole responsibility to place, secure and use the Loadrite Weighing System in a manner that will not cause accidents, personal injury or property damage. Always observe safe operating practices.

Do not install the Loadrite Weighing System in a way that may interfere with the safe operation of the vehicle, or deployment of safety equipment.

Before you use the Loadrite Weighing System for the first time, familiarize yourself with the system and its operation.



Do not handle any part of the Loadrite Weighing System if it is hot. Let the product cool, out of direct sunlight.

Ensure that the Loadrite Weighing System is connected to a power source with the correct fitting and voltage requirements.

Do not attempt to service the Loadrite Weighing System as this could result in personal injury.



Removing Loadrite Weighing System equipment or adding accessories could affect the accuracy of weighing data and your warranty.

Do not install cables over horizontal surfaces where they may be stood on or hit by falling objects.

Failure to adhere to these warnings and cautions may lead to death, serious injury or property damage. Loadrite (Auckland) Ltd disclaims all liability for installation or use of the Loadrite Weighing System that causes or contributes to death, injury or property damage, or that violates any law.

Table of contents

1.0 Welcome 7			
2.0 Introduction	8		
2.1 Loadrite-equipped loader	9		
2.2 Indicator features	10		
2.3 Total screen	11		
2.4 Accurate weighing	15		
2.4.1 Obtaining the best weighing results1	15		
2.4.2 Legal for Trade systems	15		
3.0 The day-to-day weighing process	6		
3.1 How do I turn on the Indicator?1	16		
3.2 How do I perform a warm-up?	16		
3.3 How do I select a scale?	17		
3.4 How do I zero the empty bucket?	18		
3.5 How do I select a product to weigh?	19		
3.6 How do I select a customer?	20		
3.7 How do I select a truck to load?	21		
3.8 How do I weigh and add a bucketload?	22		
3.8.1 Remote Buttons	23		
3.8.2 What is Auto-Add?	23		
3.8.3 Subtract a bucketload	23		
3.8.4 Undo/Redo	24		
3.9 How do I complete the load?	25		
3.10 How do I turn off the Indicator?	26		
4.0 Customizable data lists 2	7		
4.1 Select a data list value	27		
4.2 Add a new data list value	28		
4.3 Delete a data list value	<u>29</u>		
5.0 Target Weighing mode	0		
5.1 How do Lonter Target Weighing mode and input a target?	20		
5.1 How do Fertier rarget weighing mode and input a target?	21		
5.2 Now do Heldin to Tolarmode?	, ,		
6.0 Split Weighing mode 3	2		
6.1 Using Split Weighing mode within Total mode	32		
6.2 Using Split Weighing mode within Target Weighing mode	33		
7.0 Loadrite 360 Job Management	5		
7.1 How do I turn on the Indicator?	36		
7.2 How do I perform a warm-up?	36		

7.3 Ho	7.3 How do I select a scale?		
7.4 Ho	7.4 How do I zero the empty bucket?		
7.5 Ho	ow do I select a job?	.39	
7.5.1	How do I cancel a job?	. 40	
7.5.2	How do I add a customer or other data list to the job?	. 40	
7.6 Ho	ow do I weigh and add a bucketload?	. 41	
7.6.1	Remote Buttons	. 42	
7.6.2	What is Auto-Add?	.42	
7.6.3	Subtract a bucketload	.43	
7.6.4	Undo/Redo	. 43	
7.7 Ho	ow do I turn off the Indicator?	.44	
8.0 More Op	Dtions menu	45	
8.1 Se	elect Scale	.46	
8.2 Tr	ansaction History	.46	
8.2.1	Search for a ticket	.47	
8.2.2	Print a ticket	. 48	
8.3 M	etrics	. 49	
8.3.1	Operator Metrics	49	
8.3.2	Data Totals	. 50	
8.3.3	Target Metrics	51	
8.3.4	Weighbridge Metrics	52	
8.3.5	Time Metrics	52	
8.3.6	Lifetime Totals	. 53	
8.3.7	How do I reset metrics?	.53	
8.4 At	pout	. 53	
8.5 Se	ettings Menu	. 54	
8.5.1	Preferences	. 54	
8.5.2	Diagnostics	.57	
8.5.3	Set up	.60	
9 0 Annond	iv A: System specifications	61	
		C 1	
9.1 VV	eigning accuracy	.01	
9.2 IVI		.01	
9.3 PC		.01	
9.4 Pr		.0 I 60	
9.5 Er	Innonmental specifications	.02	
9.6 C	Sinector Specifications	62	
9.7 W	ireless opecifications	.02	
10.0 Appen	dix B: Legal information	63	

1.0 Welcome

Thank-you for purchasing this Loadrite Weighing System. Please read this manual carefully before using the for the first time. Keep this manual in a safe place and use as your first point of reference.

Formatting

The following formatting in this manual identifies specific types of information:

Convention	Type of Information	
Bold	 Indicates a button on the Indicator, or Indicates an area displayed on-screen, including buttons, headings, field names and options. 	
Italics	 Indicates the name of a screen or window, or Indicates a software function, or Indicates an operation mode that the Indicator can be set to. 	
Monospace	The exact error message displayed on-screen, orThe exact text to be entered.	

Action Terms

The following terms are used throughout this manual to describe actions:

Term	Description
Тар	Press and release a button, menu option or other item on the touchscreen.
Press	Push and release a button.
Swipe	Tap an item on the touchscreen and quickly move to the left or right before releasing.

2.0 Introduction

The Loadrite weighing system measures the weight of loads lifted by wheel loaders, forklift trucks and similar machines that use hydraulic rams to lift the load. The main parts of the Loadrite Weighing System are:

- the Indicator installed in the cab of the loader, and
- the connected sensors installed on the lifting arms.

As a load is lifted, the angle sensors and hydraulic pressure transducers send information to the Loadrite Indicator. This information is converted into a digital weight reading that is displayed on the Loadrite Indicator.

The Loadrite Indicator is the main user interface with the Loadrite Weighing System. It has an internal memory that stores settings and production data even when it is turned off.



2.1 Loadrite-equipped loader



Item	Description
1	Printer (optional)
2	Remote Add Button (optional)
3	Loadrite L5000 Indicator (LT70)
4	Power Module (LM10)
5	2x Angle Sensors
6	Pressure Transducer Interface (PTI2)
7	2x Pressure Transducers

2.2 Indicator features



Item	Name	Description
1	Power	Press to enter or exit <i>Standby</i> mode.
2	Speaker	Broadcasts buzzer and other sounds.
3	Home	Press to return to the <i>Total</i> screen.
4	Settings	Press to display the <i>Settings</i> screen.
5	Back	Press to return to the previous screen.
6	Green light	When lit, indicates that power is on.
7	SIM card slot	Slot for a SIM card, for connecting to a cellular network, if required.
8	Micro SD card slot	Slot for a micro SD card, for extending the memory of the Indicator, if required.
9	USB socket	Socket for a USB type C cable, for connecting the Indicator to a computer, if required.
1	Headphone socket	This socket is not used.

2.3 Total screen

The Total screen is the first screen that you will see when you turn on the Indicator.

From this screen, you can weigh a bucketload, undo a bucketload, change data list values (product, customer, truck, etc), access the *More Options* menu, and switch to *Target Weighing* mode or *Split Weighing* mode.





Item	Name	Description	
		 WiFi connection status White: Connected to a network via WiFi. The strength of the connection is indicated by the number of curved white bars. Gray with white X: Not connected to a network via WiFi. No icon: WiFi is turned off. Cellular connection status White: Connected to a cellular network via a SIM card. The strength of the connection is indicated by the number of white bars. Gray with white X: Not connected 	
		to a cellular network as out of range. No icon: Cellular is turned off.	
2	Data lists	 Displays the currently selected value of each data list (data lists 2 to 9), such as customer or truck. The number of data list values displayed will depend on your configuration. Swipe left or right to display more data list values, if they don't all appear on-screen. To change a data list value (such as the customer), tap the value to display the corresponding selection screen. For more information, see "Select a data list value" on page 27. 	
3	Product	 Displays the currently selected product (data list 1). To change the product, tap the value to display the <i>Select Product</i> screen. For more information, see "<i>Customizable data lists</i>" on page 27. NOTE – If data list 1 is not enabled, the next enabled data list will display, for example, customer, truck, etc. 	
4	Total	The current total amount of product that has been loaded.	
6	Bucketloads	The number of bucketloads that have been added to the total.	
6	Weighing progress bar	Indicates the position of the boom while weighing a bucketload.	
0	Action bar	The Action bar displays buttons for you to choose from to perform weighing actions. The following are some of the buttons that may display here: Image: Some of there: Image: Some of t	

Item	Name	Description	
			Split Tap to split the load between a truck and trailer.
			 For more information, see "Split Weighing mode" on page 32.
		×0•	Zero Tap to zero the empty bucket.
			 For more information, see "How do I zero the empty bucket?" on page 38.
		1	Loadrite 360 Jobs Indicates the number of trucks waiting to be loaded. Tap to display the <i>Jobs</i> screen.
			 For more information, see "Loadrite 360 Job Management" on page 35.
		Add bucket	Add Bucket Tap to add the weighed bucketload to the total.
			 For more information, see "How do I weigh and add a bucketload?" on page 22.
		Subtract	Subtract Tap to subtract the current bucketload from the total.
			 For more information, see "Subtract a bucketload" on page 43.
		Complete job	Complete Job Tap to complete the job (also known as <i>clearing the total</i>).
			 For more information, see "How do I complete the load?" on page 25.
		Cancel	Cancel Tap to cancel the current action.
8	Display Metrics	Displays up to four (4) metrics screen. If more than one scale Metrics fields may display the	s that are customized using the <i>Display Metrics</i> e is configured, then one of the Display e current scale.
		 If all metrics are not displating fields. To view full details of a metrics screep. 	aying, swipe the metrics to scroll through the etric, tap the value to display the corresponding
		 To change the scale being Scale screen. 	g used, tap the current scale to display the
		To configure the Display	Metrics , see " <i>Display Metrics</i> " on page 56.

Item	Name	Description	
9	Auto-Add	Displays the status of Auto-Add functionality. Depending on your configuration, you may be able to toggle Auto-Add between active and inactive by tapping the icon.	
		 For more information, see"What is Auto-Add?" on page 42. 	
		A⁺ ∽	Auto-Add active Indicates that Auto-Add is active.
		A +	Auto-Add inactive Indicates that Auto-Add is off.
		[No icon]	Auto-Add disabled Indicates that Auto-Add is disabled.
10	More Options	Displays the More Options menu.	
		For more information, see "More Options menu" on page 45.	

2.4 Accurate weighing

For maximum accuracy, ensure that:

- Check Zero is performed regularly.
- The load-lifting motion is steady and smooth, with no acceleration or bounce.
- The bucket is fully rolled-back during the lift.
- The loader is on level ground.

2.4.1 Obtaining the best weighing results

Lifting speed

For best results, operate the lift lever before accelerating the engine so that the machine does not rock as it lifts, i.e. use normal revs.

Trigger Point

Start the lift well below the Trigger Point. This ensures that all acceleration and load bounce has been eliminated well before the weighing sequence begins.

NOTE - We recommend that there are at least two seconds of lift before the Trigger Point.

Bounce

Most loaders have pneumatic tires which can cause the machine to bounce when lifting.

To minimize the effect of bounce, always operate the lift lever before accelerating the engine and start the lift well below the Trigger Point.

Center of gravity

The hydraulic pressure in the lifting cylinders depends on where the center of gravity of the load is. It is important that the bucket is always in the same position: fully rolled back.

2.4.2 Legal for Trade systems

Loadrite systems meet Legal for Trade requirements in certain countries. This enables material to be weighed and sold directly from the loader.

For more information or to enquire if Legal for Trade is available in your country, contact your Loadrite distributor.



TIP – Operating requirements for Legal for Trade systems are detailed in this manual where they differ from standard operating requirements.

3.0 The day-to-day weighing process

The following is the basic process for day-to-day weighing with the Loadrite Weighing System:

- 1. Turn on the Indicator .
- 2. Perform the required warm-up lifts.
- 3. Zero the empty bucket.
- 4. Select a product to weigh (optional).
- 5. Select the customer associated with the product (optional).
- 6. Weigh and add each bucketload.
- 7. When you have finished loading the truck, tap **Complete Job**. If a printer is connected, the loader's totals will be printed and payload data will be sent to InsightHQ.

3.1 How do I turn on the Indicator?

The Loadrite Indicator will turn on automatically when you start the loader.

3.2 How do I perform a warm-up?

For best weighing accuracy, the hydraulic fluid in the lift cylinders should be at normal operating temperature. This is achieved by raising and lowering the empty bucket.



The above message will display if the Indicator has been turned off for more than one hour. If you see the above message, you need to raise and then lower the empty bucket past the Trigger Point three (3) times (the default number of warm-up lifts is three, but it may be set between 1 - 99 lifts at your site):

- 1. Raise the bucket past the Trigger Point. Progress will be shown by a green bar.
- Lower the bucket past the Trigger Point. A tick will display to indicate that the warm-up lift was successful.
- 3. Repeat two (2) more times until the message disappears. When the warm-up has completed, the *Total* screen will display.

3.3 How do I select a scale?

NOTE – This step does not need to be completed if there is only one scale available. A scale only needs to be selected if more than one scale are configured.

- 1. Ensure that the *Total* screen is displayed.
- 2. Complete one of the following:

Option 2 - Display Metrics Option 1 - More Options Menu NOTE - The Scale option is only available NOTE - Only available if Scale has been on the More Options menu if multiple selected to display in the Display Metrics scales have been configured at area. installation. In the **Display Metrics** area, tap the scale. a. Тар The Select Scale screen will display. a. The More Options Menu will display. b. Tap Scale The Select Scale screen will display. ← Select Scale Scale 1 Scale 2 Scale 3 Scale 4

3. Tap the required scale.

The *Total* screen will display. All bucketloads will now be recorded as having been lifted using the selected scale until a different scale is selected.

3.4 How do I zero the empty bucket?

The Check Zero functionality is only active if configured at installation.

It is necessary to periodically "zero" the bucket because small errors can occur due to a build-up of material in the bucket.

	Check Zero

If you see the above message, you need to zero the empty bucket.

IMPORTANT – Legal For Trade systems: You must zero the bucket before beginning each new load.

IMPORTANT – When zeroing the Indicator, the bucket must be empty and kept fully-rolled back.

Complete the following to zero the bucket:

- 1. Ensure that the loader is level and the bucket is empty.
- 2. Roll the bucket backwards.
- 3. Lower the bucket to the lowest position.
- 4. Raise the empty bucket.
- 5. Tap

The Zero Updated message will display, before the Total screen is displayed.

3.5 How do I select a product to weigh?

It is important to ensure that the correct product is chosen before you begin to weigh it. Complete the following to select the product:

- 1. Ensure that the *Total* screen is displayed.
- 2. Tap the **Product** data list value. The *Select Product* screen will display.

10.37 🛜		
Select Product	×	
Search	+ Add Product	
PROD01		
PROD02		
PROD03		

- 3. Tap the product that you are weighing.
 - To reduce the number of listed products, tap the Search box, then enter characters from the product name. The list will reduce to only show those that match your search.

The *Total* screen will redisplay with the new product shown. All bucketloads will be recorded against the selected product until a different product is selected.

TIP – Depending on the workflow that has been selected at installation, each product may have its own short total, and changing the product will also change the short total that is displayed on the *Total* screen.

How do I add a new product?

You can only add a new product if enabled at installation.

If the product you are weighing is not listed on the *Select Product* screen, complete the following to add it to the list:

1. Tap + Add Product.

The Add Product screen will display.

- 2. Tap the Enter new Data Item box, then use the on-screen keyboard to enter the name of the product.
- 3. Tap 💙

The *Select Product* screen will re-display with the new product at the bottom of the list. The new product will be automatically assigned to the next load.

3.6 How do I select a customer?

You can only select a customer if the *Customer* data list has been configured and enabled at installation.

NOTE – If your Indicator is configured to use *Data Prompt* functionality, then after selecting an item, you will be prompted to also select from all other Data Lists that follow.

From the Total screen, complete the following:

1. Tap the **Customer** data list value.

The Select Customer screen will display.

÷		
Select Customer	×	
Search	+ Add Customer	
CUST01		
CUST02		
CUST03		

- 2. Tap the customer that you are weighing product for.
 - To reduce the number of listed customers, tap the Search box, then enter characters from the customer name. The list will reduce to only show those that match your search.

The *Total* screen will redisplay with the new customer shown. All bucketloads will be recorded against the selected customer until a different customer is selected.

How do I add a new customer?

You can only add a new customer if enabled at installation.

If the customer you are weighing is not listed on the *Select Customer* screen, complete the following to add it to the list:

1. Tap + Add Customer.

The Add Customer screen will display.

- 2. Tap the Enter new Data Item box, then use the on-screen keyboard to enter the name of the customer.
- 3. Tap 💙

The *Select Customer* screen will re-display with the new customer at the bottom of the list. The new customer will be automatically assigned to the next load.

3.7 How do I select a truck to load?

You can only select a truck if the *Truck* data list has been configured and enabled at installation.

- 1. Ensure that the *Total* screen is displayed.
- 2. Tap the **Truck** data list value. The *Select Truck* screen will display.

2	3:06	ই
	Select Truck	×
	Search	+ Add Truck
	ТКСК01	
	TRCK02	
	TRCK03	

- 3. Tap the truck that you are loading.
 - To reduce the number of listed trucks, tap the Search box, then enter characters from the truck title. The list will reduce to only show those that match your search.

The *Total* screen will redisplay with the new truck shown. All bucketloads will be recorded against the selected truck until a different truck is selected.

How do I add a new truck?

You can only add a new truck if enabled at installation.

If the truck you are weighing is not listed on the Select Truck screen, complete the following to add it to the list:

- 1. Tap **+ Add Truck**. The *Add Truck* screen will display.
- 2. Tap the Enter new Data Item box, then use the on-screen keyboard to enter the name of the truck.
- 3. Tap 💙

The *Select Truck* screen will re-display with the new truck at the bottom of the list. The new truck will be automatically assigned to the next load.

3.8 How do I weigh and add a bucketload?

When the Total screen is displayed, bucketloads can be weighed.

1. While keeping the bucket fully-rolled back, raise a bucketload of product smoothly through the Trigger Point using constant engine revs.

IMPORTANT – Legal For Trade systems: You must keep the bucket fully-rolled back while lifting a bucketload, or a **Bucket not emptied** message will be displayed, and the bucketload will not be recorded.

If Weight Preview functionality is enabled, a preview of the weight will display during the lift:

21:12		(í•
Loaded Okg	Total with current bucket $170 kg$	
1 70k	g	

- 2. When the bucketload has been weighed, the Indicator will beep and the *Live Weight* screen will display the following:
 - the weight of the current bucketload,
 - the total amount of product that has been loaded,
 - the new total if the bucketload is added.

19:19			ŝ
^{Loaded} 9.595t	Total with current bucket 14.485t		
4 .890t			
Cancel >0<		Subtract Add Bucket	
		Add Bucket	

3. Tap Add Bucket to add the bucketload to the total.

NOTE – If **Add Bucket** is not tapped within 8 (eight) seconds of the load being lifted past the Trigger Point, the Indicator will beep and the **Weight Discarded** message will display. The weight will then be discarded and the *Total* screen will display.

When the bucketload has been added, the *Total* screen will display with the new total and the number of added bucketloads.

4. Empty the bucketload in to the truck.

IMPORTANT – Legal For Trade systems: Depending on your region, you may need to keep the bucket fully-rolled forward when emptying, or the bucketload will not be recorded.

3.8.1 Remote Buttons

The Loadrite weighing system supports optional remote buttons. Remote buttons are positioned for your convenience, such as on or near the lift lever, or wired into the horn.

Depending on configuration, pressing a remote button may add a bucketload, complete the load, zero the bucket, or split the load.

Remote buttons can be used interchangeably with the standard buttons on the Indicator.



3.8.2 What is Auto-Add?

The Auto-Add functionality is only available if enabled at installation.

The *Loadrite* weighing system can be set to automatically add a bucketload when lifted past the Trigger Point for a specified number of seconds. This means that you don't need to tap **Add Bucket** after lifting each load.

If Auto-Add is enabled, an icon will display on the Total screen.

The following may apply depending on how Auto-Add functionality was configured at installation:

- Bucket loads may not be added if under a specified amount, or is considered to be a poor lift or bad lift.
- Auto-Add may be turned on or off (toggled) by tapping A^T on the Total screen.

3.8.2.1 Auto-Add toggle

The Auto-Add toggle functionality is only available if enabled at installation.

You can toggle between using *Auto-Add* or manually adding lifted weights by tapping A⁺ on the *Total* screen.

3.8.3 Subtract a bucketload

This *Subtract* function can be useful when only part of a final load of loose material is required. To subtract a bucketload complete the following:

- 1. Weigh and add a full bucketload as per normal, but only tip the required amount of material into the truck.
- 2. Re-weigh the bucket containing the remaining material, but do not add the bucketload.

3. Tap Subtract.

The **Bucket Subtract** message will display. The re-weighed amount will be subtracted from the total, meaning that only the amount tipped in step 1 was added. The *Total* screen will re-display.

3.8.4 Undo/Redo

The *Undo* function allows you to correct mistakes by "undoing" the previous bucketload and removing it from the total. You can then "redo" the bucketload if you need to, in effect toggling between "undo" and "redo".

You can also "undo" a discarded weight. For example, if you lift a bucketload but take more than 8 seconds to

tap **Add Bucket**, the weight will be discarded; but if you then tap (\bigcirc) , the *Live Weight* screen will reappear and you will have the option to add the weight again.

3.8.4.1 Undoing a bucketload

To undo the previous bucketload, complete the following:

■ Tap 与

The message **Undoing previous action** will display, then the *Total* screen will display a new total that doesn't include the previous bucketload.

Redoing a bucketload

To redo the undone bucketload, complete the following:

■ Tap 🗢 again.

The message **Undoing previous action** will display, then the *Total* screen will display a new total that includes the previous bucketload.

You can continue to tap to toggle between undoing and redoing the bucketload.

3.8.4.2 Undoing a discarded weight

After the **Discarded Weight** message has displayed, the *Total* screen will display. To *undo* the discarded weight, complete the following:

1. Tap 5

The discarded weight is canceled and the Live Weight screen will display the following:

- the weight of the current bucketload,
- the total amount of product that has been loaded,
- the new total if the bucketload is added.



2. Tap Add Bucket to add the bucketload to the total.

3.9 How do I complete the load?

When you have finished adding bucketloads to the truck, you must clear the total.

To clear the total, complete the following:

- 1. Tap Complete Job.
 - If the *Review* screen displays, review the values set against each data list, then complete the following:

02:50		ଏ ଠ ହି 🖬
← Review		
Product		PROD01
Customer		CUST01
Truck		TRCK01
Data List 4		ITEM01
Data List 5		ITEM01
Data List 6		ITEM01
Data List 7		ITEM01
Total	0.100 t	
		Cancel Complete Complete and Print

If	Then
a data list value is incorrect	 Tap the data list value. The Select n screen will display, for example, Select Customer or Select Product. Tap the correct value for the data list. The Review screen will redisplay with the correct data list value displayed. Repeat for each incorrect data list.
all data list values are all correct	Tap Confirm .
all data list values are all correct and you would like to print ticket	Tap Confirm and Print.



The Total screen will show the total reset to 0.

Depending on the configuration at installation, the following may happen:

- weighing data is sent to InsightHQ,
- one or more tickets are printed.
- you are prompted to select a value for each data list.

IMPORTANT - Legal For Trade systems: You must zero the bucket before beginning a new load.

3.10 How do I turn off the Indicator?

If you are not going to use the Loadrite Indicator for a while, you can put it into *Standby* mode by pressing the red power button. Press it again to exit *Standby* mode.

The Indicator will completely turn off when you turn off the loader.

4.0 Customizable data lists

The Customizable Data Lists functionality is only available if selected at installation.

Your Indicator has nine customizable data lists that are used to record information against each weight to help track and monitor weighing data. For example, data lists may be configured to record a customer, truck typetruck ID, against the weight data. The data can then be transferred to InsightHQ via a Wi-Fi network and/or printed along with the weight data.

4.1 Select a data list value

Data field values, such as Product, Truck, Customer, etc., can be changed before starting a new load. The following example shows how to select a *product* to record against the weighing data. Other data list values can be selected in the same way.

- 1. Ensure that the Total screen is displayed.
- 2. Tap the **Product** data list value. The *Select Product* screen will display.

10:37	÷.
Select Product	×
Search	+ Add Product
PROD01	
PROD02	
PROD03	

- 3. Tap the product that you are weighing.
 - To reduce the number of listed products, tap the **Search** box, then enter characters from the product name. The list will reduce to only show those that match your search.

The *Total* screen will redisplay with the new product shown. All bucketloads will be recorded against the selected product until a different product is selected.

4.2 Add a new data list value

New values can only be added to a Data List if it has been configured to allow them.

If the data list value that you need is not in the data list, then you can add the value using the keypad.

NOTE – Data field values can only be entered using specific *Western Latin* characters, such as in English.

The following example shows how to add a new *product* to the data list. Other data list values are added in the same way.

- 1. Ensure the *Total* screen is displayed.
- 2. Tap the **Product** data list value. The *Select Product* screen will display.
- 3. Tap + Add Product.

The Add Product screen will display.

23:27		•))
Add Product		×
Enter new Data	a Item	

- 4. Tap the Enter new Data Item box, then use the on-screen keyboard to enter the name of the product.
- 5. Tap 💙

The *Select Product* screen will re-display with the new product at the bottom of the list. The new product will be automatically assigned to the next load.

IMPORTANT – For sites that synchronize data using InsightHQ, the new data field value may be deleted from the Indicator if it is not assigned to a load before the next synchronization. Therefore it is best practice to create a new data field value just prior to it being used for a load, rather than creating multiple data field values in advance.

4.3 Delete a data list value

Data List values can only be deleted if the Data List that has been configured to allow it.

You can delete data list value that is no longer required. The following example shows how to delete a *product* from the data list. Other data list values are deleted in the same way.

IMPORTANT – For sites that synchronize data using InsightHQ, a deleted data field may reappear on the Indicator during the next synchronization. Therefore it is best practice to delete data field values from InsightHQ, rather than from the Indicator.

- 1. Ensure the *Total* screen is displayed.
- 2. Tap the **Product** data list value.

The -	Select	Product	screen	will	display.
-------	--------	---------	--------	------	----------

Select Product	×
Search	+ Add Product
PROD01	
PROD02	
PROD03	

3. For the data value to be deleted, swipe it to the left, then tap **1**. The *Product* screen will re-display with the deleted value removed from the list.

5.0 Target Weighing mode

Target Weighing mode is only available if enabled at installation.

Target Weighing mode provides a simple way to load a truck to a predefined target weight using a series of bucketloads. It is typically used when loading a truck to its optimum payload.

Before loading, enter a target weight value. Each time a bucketload is added, the target value is reduced by that amount.

For using Target Weighing with multiple vehicle units (such as a truck and trailer), see "Using Split Weighing mode within Target Weighing mode" on page 33.

5.1 How do I enter *Target Weighing* mode and input a target?

IMPORTANT - Legal For Trade systems: You must zero the bucket before beginning a new load.

- 1. Tap to open the **More Options** menu.
- 2. Tap Add a target.

The Add target screen will display.

22:08	Ŷ
Add target	×
Tap to input target	
Select from last three target weights 11.500t 12.720t	
	No target

3. Tap the Tap to input target box, then use the on-screen keyboard to enter the target weight value, then

tap , or tap a previous target weight, if displayed. The *Total* screen will re-display in *Target Weighing* mode.



- 4. While keeping the bucket fully-rolled back, raise a bucketload of product smoothly through the Trigger Point using constant engine revs.
- 5. When the bucketload has been weighed, the Indicator will beep and the *Live Weight* screen will display the following:
 - the target weight (Remaining weight),
 - the current bucketload,
 - the new target weight, if the bucketload is added to the truck (Remaining to load).



- 7. Tap Add Bucket to add the bucketload to the truck.
- 8. Empty the bucketload in to the truck.
- 9. Repeat steps 5-8 until the target weight is as close to **0** (zero) as possible.

IMPORTANT - Legal For Trade systems: You must zero the bucket before beginning a new load.

5.2 How do I return to Total mode?

To return to Total mode from Target Weighing mode, the target must be set to 0 (zero).

- 1. Тар
- 2. Tap **No target**.

The Total screen will re-display in Total mode.

6.0 Split Weighing mode

Split Weighing mode is only available if enabled at installation

Split Weighing mode splits the total weight into multiple sub-totals, providing an easy way to load train wagons, or a truck and trailer. *Split Weighing* mode is also used to track load distribution over a single vehicle unit, to avoid overloading an axle.

Split Weighing mode can be used in conjunction with Total or Target Weighing modes.

Example of Split Weighing



A truck with a trailer requires loading. The truck can carry 10,000 tonnes and the trailer 15,000 tonnes, making a total of 25,000 tonnes. First load the truck, then use *Split Weighing* mode to load the trailer.

6.1 Using *Split Weighing* mode within *Total* mode

- 1. In Total mode, load the truck with the required amount or product.
- 2. When the required amount of product for the truck is reached, tap to load the trailer.

The grand total of the entire vehicle is shown, along with the short total for the trailer.



Add the required amount of product to the trailer.
 As each bucketload is lifted, the bucket weight, current trailer weight and total trailer weight will display.
 Between each lift, the *Split Mode* screen will display the new total and number of buckets lifted.

4. Tap Complete Job.

- 5. If you would like to split the load to another trailer, tap , then go back to step 3; Otherwise, continue to step 6.
- 6. When all trailers have been filled, tap **Complete Job** to clear the totals. The *Total* screen will display.

6.2 Using *Split Weighing* mode within *Target Weighing* mode

- 1. Use Target Weighing mode to set a target weight and load the truck.
 - For information on *Target Weighing* mode, see "*Target Weighing mode*" on page 30.

		_
2.	When the required amount of product for the truck is reached, tap	Ż
	The Add target screen will display for the trailer.	

22:08	Ś
Add target	×
Tap to input target	
Select from last three target weights 11.500t 12.720t 17.500t	
	No target

3. Tap the **Tap to input target** box, then use the on-screen keyboard to enter the target weight value for the

trailer, then tap \checkmark ; or tap a previous target weight, if displayed. The *Total* screen will re-display, showing the target for the trailer.

4. While keeping the bucket fully-rolled back, raise a bucketload of product smoothly past the Trigger Point using constant engine revs.

If Weight Preview functionality is enabled, a preview of the weight will display during the lift:

Loaded Okg	Total with current bucket 170kg	
170	kg	

- 5. When the bucketload has been weighed, the Indicator will beep, the message **Weighing Complete** will display, and the *Live Weight* screen will display the following:
 - the target weight (**Remaining weight**),
 - the current bucketload,
 - the new target weight, if the bucketload is added to the trailer (**Remaining to load**).

20:27		Ŷ
Remaining weight 22.585t	Remaining to load	
2.455 t		
Cancel >0<		Add Bucket

- 6. Tap **Add Bucket** to add the bucketload to the trailer.
- 7. Empty the bucketload in to the trailer.
- 8. Repeat steps 4-7 until the target weight is as close to **0** (zero) as possible.
- 9. Repeat this procedure from step 2 for each additional trailer.
- 10. When all trailers have been filled, tap **Complete Job** to clear the totals. The *Total* screen will re-display.

7.0 Loadrite 360 Job Management

Loadrite 360 Job Management is a purchased add-on feature and only available if your site is configured to use it. Contact your Loadrite dealer for more information.

The *Loadrite 360 Job Management* process streamlines truck cycle times, ensuring that orders are filled correctly. Automatic sharing of ticketing information across the site prevents costly mistakes by ensuring that the correct product is loaded onto each truck. Staff can view how long each truck has been on site and ensure that they are loaded quickly.

360 jobs are entered using *Loadrite Communications Interface (LCI)* at the office. Loader operators can view a list of jobs for their zone, select the truck to load, then load it with the correct product to a specified weight.



The following is the basic process for day-to-day weighing with Loadrite 360 Job Management:

- 1. Turn on the Indicator.
- 2. Perform the required warm-up lifts.
- 3. Select the scale that is attached to the loader.
- 4. Zero the empty bucket.
- 5. Select a job.
- 6. Weigh and add each bucketload.
- 7. When you have finished loading the truck, clear the total. The payload data will be sent to *Loadrite Communications Interface (LCI)* at the office, where a ticket can be printed for the truck driver.

7.1 How do I turn on the Indicator?

The Loadrite Indicator will turn on automatically when you start the loader.

7.2 How do I perform a warm-up?

For best weighing accuracy, the hydraulic fluid in the lift cylinders should be at normal operating temperature. This is achieved by raising and lowering the empty bucket.



The above message will display if the Indicator has been turned off for more than one hour. If you see the above message, you need to raise and then lower the empty bucket past the Trigger Point three (3) times (the default number of warm-up lifts is three, but it may be set between 1 - 99 lifts at your site):

- 1. Raise the bucket past the Trigger Point. Progress will be shown by a green bar.
- 2. Lower the bucket past the Trigger Point. A tick will display to indicate that the warm-up lift was successful.
- 3. Repeat two (2) more times until the message disappears. When the warm-up has completed, the *Total* screen will display.

7.3 How do I select a scale?

NOTE – This step does not need to be completed if there is only one scale available. A scale only needs to be selected if more than one scale are configured.

- 1. Ensure that the *Total* screen is displayed.
- 2. Complete one of the following:

Option 1 - More Options Menu

NOTE – The **Scale** option is only available on the *More Options* menu if multiple scales have been configured at installation.

a. Tap 🕯

The More Options Menu will display.

b. Tap **Scale**

The Select Scale screen will display.

06:47	4 0) 🕆 🗶	
← Select Scale			
Scale 1			
Scale 2			
Scale 3			
Scale 4			
			L

Option 2 - Display Metrics

NOTE – Only available if **Scale** has been selected to display in the **Display Metrics** area.

a. In the **Display Metrics** area, tap the scale. The *Select Scale* screen will display.

3. Tap the required scale.

The *Total* screen will display. All bucketloads will now be recorded as having been lifted using the selected scale until a different scale is selected.

7.4 How do I zero the empty bucket?

The Check Zero functionality is only active if configured at installation.

It is necessary to periodically "zero" the bucket because small errors can occur due to a build-up of material in the bucket.

Check Zero

If you see the above message, you need to zero the empty bucket.

IMPORTANT - Legal For Trade systems: You must zero the bucket before beginning each new load.

IMPORTANT – When zeroing the Indicator, the bucket must be empty and kept fully-rolled back.

Complete the following to zero the bucket:

- 1. Ensure that the loader is level and the bucket is empty.
- 2. Roll the bucket backwards.
- 3. Lower the bucket to the lowest position.
- 4. Raise the empty bucket.
- 5. Tap •0•

The Zero Updated message will display, before the Total screen is displayed.

7.5 How do I select a job?

The *Jobs* screen displays a list of trucks in your zone that are waiting to be loaded. To assist you in selecting the next job, jobs are listed in the order of priority, and include the following information:

- The truck name or registration number
- The product to be loaded
- The weight of product to be loaded
- The amount of time that the truck has been waiting to be loaded.

To select a job, complete the following:

1. From the *Total* screen, tap The *Jobs* screen will display.

00:22 FM						오네 프
Concre	ete yard -		Weight p/h 12.679	Last bucket 10.300	A ⁺	:
Truck	<u>¢≓</u>	Product		Target 🎯		
EAH	1924	GAP 40		21.500t	(§ 14m	
wo	BZK295	GAP 45 MR9 Golden Bay	1234	27.000t	(§ 11m	
RPG	458	GAP 25		16.100t	(§ 10m	
HGT	1982	GAP 40		17.500t	(§ 9m	
OIU	209	Scoria Annabella		17.500t	(§ 8m	

2. Check that the zone displayed at the top left of screen is correct, then complete the following:

If	Then
the zone is correct	continue to step 3.
the zone is incorrect	 Tap the Zone. The Select a zone drop-down box will display a list of available zones. Tap the correct zone. The <i>Jobs</i> screen will display a list of available jobs for the selected zone.

3. Tap the job that you would like to work on.

The *Total* screen will display in *Target Weighing* mode, displaying the truck, product and amount to be weighed, in order to complete the job.

7.5.1 How do I cancel a job?

You can cancel a job and return it to the list of jobs on the *Jobs* screen, if no bucketloads have been added. You may want to cancel the job if you selected the wrong job, or it needs to be assigned to a different loader.

To cancel a job, complete the following:

- To cancel a job, tap Cancel Job. The Jobs screen will display a list of available jobs, including the canceled job.
 - If a bucketload has already been added, tap 5 to undo the bucketload, then tap **Cancel Job**.

7.5.2 How do I add a customer or other data list to the job?

You can only select a data list if that data list has been configured and enabled at installation.

You can add or change the customer or other data list for the active job at any time before completing the job. The only data list that cannot be changed is the **Truck** data list, as changing the truck is the same as ending the job and beginning a new job.

The following procedure shows how to add or change the **Customer** for the job:

- 1. Tap the **Customer** data list value.
 - The Select Customer screen will display.

23:05	ি
Select Customer	×
Search	+ Add Customer
CUST01	
CUST02	
CUST03	

- 2. Tap the customer to apply to the job.
 - To reduce the number of listed customers, tap the **Search** box, then enter characters from the customer name. The list will reduce to only show those that match your search.

The Total screen will redisplay with the job set to the selected customer.

7.6 How do I weigh and add a bucketload?

After selecting a job, the *Total* screen will display in *Target Weighing* mode, displaying the truck, product and amount to be weighed in order to complete the job.

IMPORTANT – Legal For Trade systems: You must zero the bucket before beginning a new load.

1. Raise a bucketload of product smoothly through the Trigger Point using constant engine revs

IMPORTANT – Legal For Trade systems: You must keep the bucket fully-rolled back while lifting a bucketload, or a **Bucket not emptied** message will be displayed, and the bucketload will not be recorded.

2. If Weight Preview functionality is enabled, a preview of the weight will display during the lift:

21:12		((i·
Loaded Okg	Total with current bucket	
170kg		
•		

- 3. When the bucketload has been weighed, the Indicator will beep and the *Live Weight* screen will display the following:
 - the target weight for the job,
 - the current bucketload,
 - the new target weight, if the bucketload is added to the truck.

Remaining weight 22.585t	Remaining to load 20.130t	
2.4551	:	
Cancel >0<		Add Bucket

- 4. Tap Add Bucket to add the bucketload to the truck.
- 5. Empty the bucketload in to the truck.
- 6. Repeat steps 1-5 until the target weight is as close to **0** (zero) as possible.

7.0 Loadrite 360 Job Management

7. Tap **Complete Job** to complete the job.

The Jobs screen will display. The final total will be sent to Loadrite Communications Interface (LCI) at the office, where a ticket can be printed for the truck driver.

To select a new job, see "How do I select a job?" on page 39.

7.6.1 Remote Buttons

The Loadrite weighing system supports optional remote buttons. Remote buttons are positioned for your convenience, such as on or near the lift lever, or wired into the horn.

Depending on configuration, pressing a remote button may add a bucketload, complete the load, zero the bucket, or split the load.

Remote buttons can be used interchangeably with the standard buttons on the Indicator.



7.6.2 What is Auto-Add?

The Auto-Add functionality is only available if enabled at installation.

The *Loadrite* weighing system can be set to automatically add a bucketload when lifted past the Trigger Point for a specified number of seconds. This means that you don't need to tap **Add Bucket** after lifting each load.

If Auto-Add is enabled, an icon will display on the Total screen.

The following may apply depending on how Auto-Add functionality was configured at installation:

- Bucket loads may not be added if under a specified amount, or is considered to be a poor lift or bad lift.
- Auto-Add may be turned on or off (toggled) by tapping A⁺ on the Total screen.

7.6.2.1 Auto-Add toggle

The Auto-Add toggle functionality is only available if enabled at installation.

You can toggle between using Auto-Add or manually adding lifted weights by tapping At on the Total screen.

7.6.3 Subtract a bucketload

This *Subtract* function can be useful when only part of a final load of loose material is required. To subtract a bucketload complete the following:

- 1. Weigh and add a full bucketload as per normal, but only tip the required amount of material into the truck.
- 2. Re-weigh the bucket containing the remaining material, but do not add the bucketload.

3. Tap Subtract.

The **Bucket Subtract** message will display. The re-weighed amount will be subtracted from the total, meaning that only the amount tipped in step 1 was added. The *Total* screen will re-display.

7.6.4 Undo/Redo

The *Undo* function allows you to correct mistakes by "undoing" the previous bucketload and removing it from the total. You can then "redo" the bucketload if you need to, in effect toggling between "undo" and "redo".

You can also "undo" a discarded weight. For example, if you lift a bucketload but take more than 8 seconds to

tap **Add Bucket**, the weight will be discarded; but if you then tap (), the *Live Weight* screen will reappear and you will have the option to add the weight again.

7.6.4.1 Undoing a bucketload

To undo the previous bucketload, complete the following:

■ Tap 5

The message **Undoing previous action** will display, then the *Total* screen will display a new total that doesn't include the previous bucketload.

Redoing a bucketload

To redo the undone bucketload, complete the following:

■ Tap 🖆 again.

The message **Undoing previous action** will display, then the *Total* screen will display a new total that includes the previous bucketload.

You can continue to tap to toggle between undoing and redoing the bucketload.

7.6.4.2 Undoing a discarded weight

After the **Discarded Weight** message has displayed, the *Total* screen will display. To *undo* the discarded weight, complete the following:

1. Tap 5

The discarded weight is canceled and the Live Weight screen will display the following:

- the weight of the current bucketload,
- the total amount of product that has been loaded,
- the new total if the bucketload is added.



2. Tap Add Bucket to add the bucketload to the total.

7.7 How do I turn off the Indicator?

If you are not going to use the Loadrite Indicator for a while, you can put it into *Standby* mode by pressing the red power button. Press it again to exit *Standby* mode.

The Indicator will completely turn off when you turn off the loader.

8.0 More Options menu

The items displayed on the More Options Menu depend on settings configured at instalation.

The More Options menu provides options for configuring the LoadriteL5000 Weighing System.

To display the *More Options* menu, tap when the *Total* screen is displayed.

Menu Option	Description
Add a target	Accesses Target Weighingmode functionality.
	 For information on <i>Target Weighing</i> mode, see "<i>Target Weighing mode</i>" on page 30.
Scale	Allows the current scale (attachment) to be changed, if more than one scale has been configured at installation.
Transaction history	Displays the transaction history and allows tickets to be searched for, displayed on-screen, and printed.
Metrics	Accesses the <i>Metrics</i> menu to view operator metrics, data totals, loading metrics, and lifetime totals.
About	Displays Indicator hardware, software and network specifications, and copyright information.
Settings	Accesses appearance and setup settings.
	 An access code is required to access the <i>Installer Menu</i> and other special menus. For further information, contact your Loadrite dealer.

8.1 Select Scale

> : > Scale

The Scale option is only available if multiple scales have been configured at installation.

The Select Scale screen is used to select the correct loading attachment, to ensure that the lifted weight is accurate.

06:47	4	
← Select Scale		
Scale 1		
Scale 2		
Scale 3		
Scale 4		

1. Tap the scale to select it.

The *Total* screen will display with the name of the selected scale shown. All bucketloads will be recorded against the selected scale until a different scale is selected.

8.2 Transaction History

> Transaction History

The *Transaction History* screen displays a list of all tickets for the selected date. Individual tickets may be searched for by ticket number, previewed on-screen, or printed to a connected printer. Ticket information is stored on the Indicator for up to 90 days.

15:33			∢ ∆ ≷ X
Transaction h	nistory		Q X
6 October		7 October 2023 🛗	8 October 🔶
LR-000003	04:37		>
LR-000002	04:26		>
LR-000001	04:09		>
LR-000000	04:06		>
LR-999999	03:56		>

- Tap a ticket in the list to display the details.
- Swipe the list up or down to display more tickets from the day, if available.
- Tap \leftarrow or \rightarrow to display a list of tickets from the next or previous day.

Tap it to open the pop-up calendar.
 Use the calendar to select a different day, then tap **Ok** to display a list of tickets for the selected day.

8.2.1 Search for a ticket

To search for a ticket by ticket number, complete the following:

- From the *Transaction History* screen, tap The *Ticket Number* screen will display.
- 2. Use the on-screen keypad to enter the ticket number of the ticket that you would like to view, then tap . The ticket search results will display on-screen.

15:38			🕈 🗅 🗟 🕱
Search res	ults		×
LR-000003	4:37 AM		>

3. Tap the ticket that you would like to preview. The ticket will display on-screen.

15:30			<i>ଏ ଠ ବି</i> 🗶
			×
	LOADRITE LR-000000 ID 0 7 October 2023, 04:06 Scale Add [1] PROD01 [1]	Scale 1 0.200 t 0.200 t	
			Print

• Tap **Print** to send the ticket to the connected printer.

8.2.2 Print a ticket

To print a ticket, complete the following:

1. From the *Transaction History* screen, select a ticket or search for a ticket. The *Ticket* screen will display a preview of the selected ticket.

15:30			∢ ଠ ବି X
			×
	LOADRITE LR-000000 ID 0 7 October 2023, 04:00 Scale 	6 Scale 1 0.200 t 0.200 t	
			Print

2. Complete the following:

If	Then
the Indicator is connected to a remote printer via LG500	 the options Print Remote and Print in Cab will display. Tap Print Remote to print via the LG500, or Tap Print in Cab to print via the printer in the loader cab (if available).
the Indicator is only connected to a printer in the loader cab	Tap Print . The ticket is sent to the connected printer.

8.3 Metrics

> : > Metrics

The Metrics menu allows you to view operator metrics, data totals, loading metrics, and lifetime totals.

8.3.1 Operator Metrics

> : > Metrics > Operator

03:13					∢ ⊜ ≋ ∎∥
Metrics					×
Operator	Data Totals	Target	Weighbridge	Time	Lifetime ⁻
Total weigh	nt 00 +	Average w 5.811t	eight per hour	Load coun 10	t
0.5	υυ ι	Time of fi	rst load	Time of la	st load
		U2:56	et Weight	00:12	
Reset Metrics)	0.0001			

The Operator Metrics screen displays your KPI metrics since they were last reset.

Item	Description
Total weight	The total weight of all bucketloads added.
Average weight per hour	The average weight lifted per hour.
Load count	The number of truckloads successfully added.
Time of first load	The time that the first bucketload was added
Time of last load	The time that the last bucketload was added.
Last Bucket Weight	The weight of the last bucketload added.

8.3.2 Data Totals

> Metrics > Data Totals

03:18				4	୦ ବି∎∥
Metrics					\times
Operator	Data Totals	Target	Weighbridge	Time	Lifetime
Total weight			< Product	>	
0 50	0 1	\bigtriangleup	4	\bigcirc	
8.50	U t	PROD01	4.500 t	00:00:22	
Loaded Since	00	PROD02	2.000 t	00:00:02	
23:03 - 21/0 Time of last load 02:55 - 02/7	11	PROD03	2.000 t	00:00:03	
Reset Metrics					Print

The Data Totalsscreen displays the total amount of each data list value weighed.

• Tap the name of the Data List to select a different one, or tap > or < to scroll through each one.

Item	Description
Total weight	The total weight of all bucketloads added.
Loaded Since	The date and time that the first bucketload was added.
Time of last load	The date and time that the last bucketload was added.
Data List	Scroll through each data list to display all data list values, with the total weight and total time taken to load for each one.

8.3.2.1 Print metrics

To print metrics, complete the following:

- 1. From the *Data Totals* screen, tap **Print**.
- 2. Select or clear each data item until only those that you would like to display on the ticket are selected, then tap **Print**.
- 3. The *Ticket* screen will display a preview of the ticket.

03:32			∜ ∆ ≷ ⊭ ∥
			×
	LOADRITE ID 0 2 November 2023, 03:31 Period: 23:05 21/09 - 02:55 02/11 Grand Total: Product PROD01 PROD02 PROD03	8.500 t 4.500 t 2.000 t 2.000 t	
	~ ·		Print

4. Tap Print.

The ticket is sent to the connected printer.

8.3.3 Target Metrics

> Hetrics > Target Metrics

3:37					∢ ଠ ବି∎∥
Metrics					×
Operator	Data Totals	Target	Weighbridge	Time	Lifetime
Average		0	•	0	~
BASED ON THE LAS	5 TRUCK(\$)	TRCK01	0.100 t	2.000 t	↓ 1.900 t
↓-∠.	0301				
•	•				

The *Target Metrics* screen displays the target weights and actual weights of the last five trucks, so that the difference can be monitored.

Item	Description
Average	The average load and average cycle time since metrics were last reset.
0	The registration number/name of the truck.
4	The actual loaded weight for the truck.
0	The target weight for the truck.
\sim	The difference between the target weight and actual weight for the truck.

8.3.4 Weighbridge Metrics

The Weighbridge Metrics screen is only available if Loadrite360 is active.

> Metrics > Weighbridge

The *Weighbridge Metrics* screen displays the weights determined by the Loadrite Indicator vs the weights determined by a weighbridge, so that any difference can be monitored.

Item	Description
Average	The average load and average cycle time since metrics were last reset.
0-00	The registration number/name of the truck.
•	The weight as determined by the Indicator.
4	The weight as determined by the weighbridge.
\sim	The difference between the Indicator weight and the weighbridge weight.

8.3.5 Time Metrics

The *Time Metrics* screen is only available if *Loadrite360* is active.

> Metrics > Time

>

The *Time Metrics* screen displays the turnaround time (cycle time) for trucks, providing a comparison with the target loading times.

Item	Description
Average Loading Time	The average loading time since metrics were last reset.
Average Turnaround Time	The average turnaround time (cycle time) since metrics were last reset.
Q. 	The registration number/name of the truck.
	The time taken to load the truck.
<u>9</u> C	The time elapsed from when the truck entered the site to when it exited the site.

8.3.6 Lifetime Totals

> Metrics > Lifetime Totals

09:52	09:52 🍕 🗘 🔶 🐒				
Metrics			×		
ator	Data Totals	Target	Weighbridge	Time	Lifetime Totals
	Weight 124.6 Load Count 10 Bucket Count 33	60t			

The *Lifetime Totals* screen displays the total amount weighed by the Indicator since it was last factory reset. The figures are irrespective of whether the metrics have been reset.

Item	Description
Weight	The total weight of all bucketloads ever added.
Load Count	The total number of all truckloads ever weighed.
Bucket Count	The total number of all bucketloads ever added.

8.3.7 How do I reset metrics?

To reset all metrics, tap **Reset Metrics** from the *Operator Metrics* or *Data Total Metrics* screen. If a printer is connected and enabled, a ticket will be printed listing all of the loader's loadout activity since the metrics were last reset.

CAUTION – When reset, all metrics data is deleted from the Indicator and cannot be recovered.

8.4 About



The *About* screen displays system information about the Loadrite L5000 Indicator, including hardware, software and network specifications, and copyright information.

8.5 Settings Menu

> Settings

The Settings menu provides access to settings for configuring the Loadrite L5000 Indicator. Some settings are only accessible using access codes.

8.5.1 Preferences

> Settings > Preferences

The Preferences menu allows you to customize your experience.

8.5.1.1 Dark Mode

> Settings > Preferences > Enable dark mode

When *Dark* mode is enabled, the screen theme changes from bright colors to darker colors. *Dark* mode may be easier on the eyes in lower-light environments, or for people with sensitive eyes.

Available options

Option	Description	Default
	<i>Dark</i> mode is enabled. All screens will have a darker tone and use darker colors.	
8	<i>Dark</i> mode is disabled. All screens will have a brighter tone and use brighter colors. Also referred to as <i>Light</i> mode.	1

8.5.1.2 Volume

> Settings > Preferences > Volume

Complete the following to change the volume of the Loadrite L5000 Indicator:

1. Tap Volume.

A Volume pop-up box will display.

2. Tap and move the slider left to decrease volume, or tap and move the slider right to increase volume. The Indicator will beep at the new volume. The pop-up box will close.

8.5.1.3 Date and Time

> Preferences > Date and Time

The *Date and Time* functionality is used to set the date, time and time format used on the Indicator. It does not alter the time and date format on printed tickets.

8.5.1.3.1 Set the date and time

Preferences > Date and Time > Date and Time

Complete the following to set the time and date:

- Tap and scroll the date picker to select the current Year, Month and Day.
- Tap and scroll the time picker to select the current **Hour**, **Minute** and **Second**.
- When the time and date are correct, tap **OK** to return to the *Date and Time* screen.

8.5.1.3.2 Change the time format

> Preferences > Date and Time > 24-Hour Time

Controls whether the clock in the **Notification Bar**, and printed tickets display the time in 12-hour format or 24-hour format.

Available options

Option	Description
	The time is displayed in 24-hour format, for example 13:06 .
\bigotimes	The time is displayed in 12-hour format, for example 1:06 PM .

8.5.1.4 Display Metrics

Settings > Preferences > Display Metrics

Display Metrics allows you to customize the metric and scale information displayed in the four (4) **Display Metric** fields of the *Total* screen. The **Display Metric** section can display up to four (4) pieces of information, specified from left to right (L-R) as **Display Metric 1** to **Display Metric 4**.

- 1. Tap the **Display Metric** you would like to configure. A pop-up box will display a list of metrics.
- 2. Select the metric that you would like to display in the selected Display Metric field:

Option	Description
Last Bucket Weight	Displays the weight of the last bucketload to be successfully added.
Total Buckets	Displays the total weight of all bucketloads added today.
Load count	Displays the number of bucketloads successfully added today.
Weight p/r	Displays the average weight lifted per hour for today.
Scale	Displays the currently selected scale.
None	The Display Metric field does not display any information.
	This is the default option for all Display Metric fields.

8.5.1.5 User Manual

> Settings > Preferences > User Manual

The User Manual for the LoadriteL5000 will display on-screen. Use the following controls to navigate the manual:

- Swipe up or down to scroll through the pages.
- Tap ▲ to display the previous page, or tap ▼ to display the next page.
- Tap and drag the page number (right side of screen) up or down to scroll through the pages.
- Tap to display a list of chapter titles. Tap a chapter title to display the first page of the chapter.

8.5.1.6 Language

> Settings > Preferences > Language

The Loadrite Indicator supports multiple languages. The **Language** setting changes the current language used on-screen.

Available options

- Valid values depend on your region of the world.
- The default value is English.

8.5.2 Diagnostics

> Settings > Diagnostics

The *Diagnostics* menu consists of a range of diagnostic functions to assist in finding faults, including live information and tests.

8.5.2.1 System Status

1.51		• D	÷γ.
← Syste	m Status	<	>
Scale 2	2		
Status	Certification Identifier Calibration Code		
DTI	Obassia Dear Dualat		
PTI	Chassis Boom Bucket		
lift Drocor			
Lift Press	Jre Return Pressure		

The *System Status* screen is used to verify the Trade Approval status of each scale. Information displayed includes:

- Scale ID
- Trade Approval Status
- Certification Identifier
- Calibration Code
- Detected sensors
- Transducer lift and return pressure
- Kernel checksum status
- Application checksum status.

8.5.2.2 Connectivity

Settings > Diagnostics > Connectivity

Displays the current status and relevant information of various connections on one screen, to assist with troubleshooting.

Information displayed includes the status of cellular, WiFi, Internet and LG500 connections, as well as the serial number, current software version and OTA (firmware) update status.

8.5.2.3 CAN Devices

> Settings > Diagnostics > CAN Devices

The CAN Devices screen displays a list of connected CAN devices. You can view live information for each device by selecting it from the list.

8.5.2.4 Pressure Diagnostics

> Settings > Diagnostics > Pressure Diagnostics

Displays the current Lift Pressure and Return Pressure values from the pressure transducers.

8.5.2.5 Orientation Sensors

Settings > Diagnostics > Orientation Sensors

Displays the current Boom, Pitch, Rolland Bucket values from the orientation sensors.

8.5.2.6 CAN Diagnostics

> Settings > Diagnostics > CAN Diagnostics

The CAN Diagnostics screen displays the current counters for CAN Bus events. Information displayed includes CAN Tx Queu Overflow, Serial Buffer Overflow, Serial Queue Overflow, Retry Counts and Packet Errors.

8.5.2.7 Input Diagnostics

Settings > Diagnostics > Input Diagnostics

The *Input Diagnostics* screen displays the current assignments for the two remote buttons as specified by **Remote Button 1** and **Remote Button 2**.

8.5.2.8 System Time

> Settings > Diagnostics > System Time

Displays live time information, including Local Time, UTC (Coordinated Universal Time), GPS Time, System Time, System Time Zone, Local Offset (from UTC), Location, and Sync (synchronization status).

8.5.2.9 GPS

> Settings > Diagnostics > GPS

Displays current GPS information used to calculate location, speed, etc. Information displayed includes **Fix Type**, **Latitude**, **Longitude**, **Satellites**, and **Date and Time**.

8.5.2.10 Certificates

> Settings > Diagnostics > Certificates

Displays the current status of the processes and connections required to retrieve certificates.

8.5.2.11 Screen Display Test

> Settings > Diagnostics > Screen Display Test

Performs a test of the display screen before displaying the Checksum status.

8.5.2.12 L5000 Web Interface



The Web Interface screen provides a QR Code and URL address that you can use to access the Loadrite L5000 Web Interface via your device.

The Loadrite L5000 Web Interface allows you to control the following features:

- Lift Simulator
- Firmware Update
- Backup Configuration and Calibration Settings
- Connectivity Status

To open the Loadrite L5000 Web Interface, complete the following:

1. Use the camera (or QR Code app) on your device to scan the QR code on the *Web Interface* screen (or record the URL address and type it into the address bar of your browser).

2. The Loadrite L5000 Web Interface will open in a new browser tab on your device.

	LOA	NDR	ITE	
Simulator	Update	Snapshot	Connectivity	Scope
	_ift Sim	nulator		
E	inter Weigh	nt	k	g
ι	Jnit: kg	•		
	Lift			
	111	Ο	<	

For information on using *Loadrite L5000 Web Interface*, contact your distributor.

8.5.3 Set up

The Set up screen provides access to the Access Code screen. From the Access Code screen, the Installer Menu and a range of other menus and features can be accessed, depending on the code that is entered.

• For further information, contact your Loadrite dealer.

9.0 Appendix A: System specifications

9.1 Weighing accuracy

Typical accuracy is within \pm 1 % for most loaders. This may vary with different machine types, installation options, and the operating environment.

9.2 Minimal weighing delay

Weighing delay is minimal, because the weighing function is carried out during a normal lift.

9.3 Power requirements

Supply voltage	24 V DC vehicular supply.
Power consumption	3 A maximum.

9.4 Physical specifications

LCD display	7 inch; 1280 x 800 pixels (HD); 800 cd/m2; Sunlight-readable; 10-point multitouch capacitive.
Weight	LT70 Indicator: 0.8 lb (1.76 kg)
(excluding mounting)	LM10 Power Module: 0.25 lb (0.55 kg)
Dimensions	LT70 Indicator: 207.4 mm x 137.4 mm x 30.1 mm (8.17" x 5.41" x 1.19")
(excluding mounting)	LM10 Power Module: 109 mm x 113 mm x 45 mm (4.29" x 4.45" x 1.77")

9.5 Environmental specifications

Operating temperature	LT70 Indicator: -10° C to 65° C (14° F to 55° F) LM10 Power Module: -40° C to 80° C (-40° F to 176° F).
Storage temperature	LT70 Indicator: –20°C to 70°C (-4°F to 158°F) LM10 Power Module: -40° C to 85° C (-40° F to 185° F).
Ingress protection	LT70 Indicator: IP67 LM10 Power Module: IP31
Shock and vibration	MIL-STD-810G

9.6 Connector Specifications

LT70 Indicator	Power connector: M16-12P-F	
LM10 Power Module	 CAN 1: Deutsch DT04-4P or equivalent 	
	 CAN 2: Deutsch DT04-4P or equivalent 	
	 Power: Deutsch DT04-3P or equivalent 	
 Tablet communications: Deutsch DT04-12P or equivalent 		
	 Digital I/O: Deutsch DT04-4P or equivalent 	
	 Serial GPS/Printer: Deutsch DT04-6P or equivalent. 	

9.7 Wireless Specifications

Bluetooth (WPAN)	4.2 BLE
WiFi (WLAN)	IEEE 802.11 a/b/g/n/ac; 2.4GHz/5GHz
Mobile broadband	LTE HSPA+, UMTS, EDGE. GPRS, GSM
GNSS	GPS/GLONASS

10.0 Appendix B: Legal information

Disclaimer

Loadrite (Auckland) Ltd operates a policy of on-going development. Please note that while every effort has been made to ensure that the data given in this document is accurate, due to continued product development, the information, figures, illustrations, tables, specifications, and schematics contained herein are subject to change without notice. Loadrite (Auckland) Ltd does not warrant that this document is error-free. The screenshots and other presentations shown in this manual may differ from the actual screens and presentations generated by the actual product. All such differences are minor and the actual product will deliver the described functionality as presented in this document in all material respects. If you find any errors in the document, please report them to us in writing.

Loadrite (Auckland) Ltd assumes no liability in connection with the use of any Loadrite branded product.

Loadrite (Auckland) Ltd is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user's authority to operate the equipment.

Compliance

Domain	Policy	Description	Top-Level Requirement
Australia / New Zealand	Radiocommunications (EMC Standards) Notice 2019	Emissions (industrial)	ISO 61000-6-2, ISO 61000-6-4
	Radiocommunications (EMC Standards) Notice 2020	Radio emissions (intentional)	ETSI EN300 328
Canada	ICES-GEN 2021	Emissions (industrial)	ANSI C63.4
	RSS-GEN 2021	Radio emissions (intentional)	ETSI EN300 328
Europe	Electromagnetic Compatibility Directive 2014/30/EU	Emissions/Immunity (industrial)	ISO 61000-6-2, ISO 61000-6-4
	Radio Equipment Directive 2014/53/EU	Radio emissions (intentional)	ETSI EN300 328
	Restriction of Hazardous Substances Directive 2011/65/EU and 2015/863	Restriction of Hazardous Substances	IEC 63000:2018
United Kingdom	Electromagnetic Compatibility Regulations 2016	Emissions (industrial)	ISO 61000-6-2, ISO 61000-6-4
	Radio Equipment Regulations 2017	Radio emissions (intentional)	ETSI EN300 328
	The Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment Regulations 2012	Restriction of Hazardous Substances	EN 50581:2012
United States of America	FCC 47 CFR Part 15 Subpart B - Unintentional radiators	Emissions (industrial)	ANSI C63.4
	FCC 47 CFR Part 15 Subpart C - Intentional radiators	Radio emissions (intentional)	ETSI EN300 328



This Loadrite product is fully EMC (Electro-Magnetic Compatibility) compliant and is CE marked accordingly. A Declaration of Conformity, in accordance with the EMC Directive 2014/30/EU (and as amended) is available from Loadrite (Auckland) Ltd on request: info@goloadrite.com

Loadrite (Auckland) Ltd cannot be held responsible for modifications made by the User and the consequences thereof, which may alter the conformity of the product with CE marking.

Hereby, Loadrite (Auckland) Ltd declares that the L5000 devices are in compliance with the essential requirements and other relevant provisions of CE.

This Loadrite product is explicitly excluded from the scope of EU RoHS 2 Directive 2011/65/EU in article 2, section (4), paragraphs: (d), (e), (f) and (g).

This device complies with part 15 of the FCC Rules and Industry Canada licence-exempt RSS standard(s). Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

WARNING - This product contains chemicals known to the State of California to cause cancer, birth

defects or other reproductive harm. This Notice is being provided in accordance with California's Proposition 65.

Disposing of Loadrite electronic equipment

This electronic product is subject to the EU Directive 2012/19/EU for Waste Electrical and Electronic Equipment (WEEE) which requires the separate collection, treatment, recycling and environmentally-sound final disposal of waste of electrical and electronic equipment. As such, this product must not be disposed of at a municipal waste collection point. Please refer to local regulations for directions on how to dispose of this product in an environmentally-friendly manner.



Third-party software licenses

The following third-party software libraries are included as part of the L5000 software: jQuery: Licensed under the MIT License. JSStore: © Ujjwal Gupta. Licensed under the MIT License. Lodash: Licensed under the MIT License. MD5: © 2011 Sebastian Tschan, https://blueimp.net. Licensed under the MIT License. moment: Licensed under the MIT License. Picolog: © 2015 by Stijn de Witt. Some rights reserved. Licensed under the Creative Commons Attribution 4.0 International (CC-BY-4.0) Open Source license: https://creativecommons.org/licenses/by/4.0/



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