



ENVIRONMENT PROTECTION

Recycle unwanted materials instead of disposing of them as waste. All tools, accessories and packaging should be sorted, taken to a recycling centre and disposed of in a manner which is compatible with the environment. When the product becomes completely unserviceable and requires disposal, drain any fluids (if applicable) into approved containers and dispose of the product and fluids according to local regulations.

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Instruction Manual

DIGITAL CRANE SCALE DCS2-1T

Order Code: (C191)

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IMPORTANT INFORMATION

1 Year Limited Warranty

HAFCO offers a one year limited warranty on this product.

HAFCO warrants to the original retail consumer and purchaser that this product will be free from defects in materials and workmanship for one year from the date the product was purchased ('the warranty period').

HAFCO will rectify any defect in materials or workmanship appearing within the warranty period by repairing or replacing the product. HAFCO will offer a refund of the purchase price if the product cannot be readily and quickly repaired or replaced. HAFCO reserves the right to determine whether the product contains any defects in materials or workmanship covered by this warranty.

The benefits offered by this warranty are in addition to your rights and remedies that may apply in law. Our goods come with guarantees that cannot be excluded under the Australian Consumer Law. You are entitled to a replacement or refund for a major failure and for compensation for any other reasonable foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

How to make a warranty claim

To make a claim under this warranty, the product or part must be returned for examination to an authorised service centre nominated by Hare and Forbes Machineryhouse together with proof of purchase such as the dated sales receipt and an explanation of the problem to be rectified.

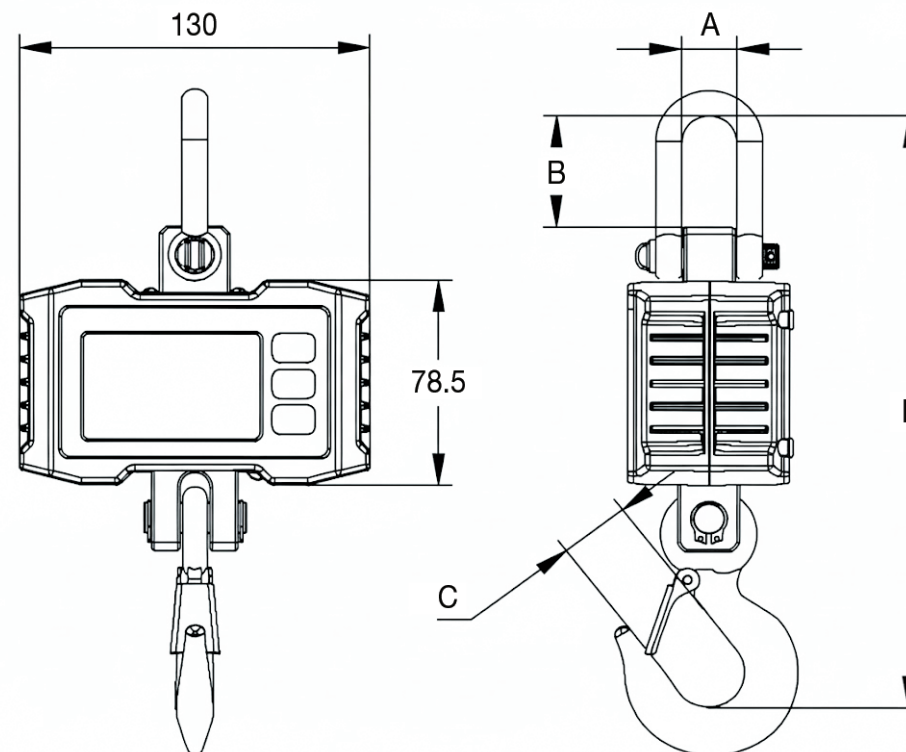
Any costs incurred in making a claim under this warranty or returning the product to an authorised service centre is to be borne by the person making the claim unless other wise agreed by Hare and Forbes Machineryhouse. If Hare and Forbes Machineryhouse determines the product contains a defect in materials or workmanship that is covered by this warranty then Hare and Forbes Machineryhouse will bear the cost of returning the repaired product or replacement product to the person making the claim. If We determines the product does not contain a defect in materials or workmanship covered by this warranty then the cost of returning the product will be at the expense of the person making the claim.

Warranty Exclusions

The warranty does not apply in the following cases:

- Unauthorised modification, disassembly, repair, or replacement of the whole unit or any internal components, or damage caused by improper or artificial handling.
- Damage resulting from incorrect installation, improper use, misuse, negligence, or accidental impact.
- **Batteries;** which are considered consumable items and are **not covered under warranty.**

Specifications



Model	A/mm	B/mm	C/mm	L/mm	N.W./kg
DCS2-1T	42.3	48.5	20.5	260	1.54

Product Overview

The OCS Electronic Crane Scale is designed for accurate and reliable overhead weighing in industrial environments. It is equipped with a high-accuracy load sensor, advanced A/D converter, and an intelligent digital processing system to ensure precise and stable measurements.

The scale features a large 1.2-inch (30 mm) super-bright LED digital display, providing clear and easy-to-read weight values even from a distance and in low-light conditions.

An intelligent anti-vibration digital filtering system is used to minimise the effects of load movement and environmental vibration, delivering stable readings within less than 5 seconds.

Power & Battery Performance

The crane scale uses a low-power design to maximise battery efficiency. When using the LED display, the battery can operate continuously for up to 60 hours on a full charge.

An over-discharge protection circuit is built in to prevent battery damage caused by excessive discharge, extending battery life and improving long-term reliability.

An automatic power-saving function further reduces energy consumption when the scale is idle.

The battery status is displayed at start-up, allowing users to monitor power levels and select the appropriate time for recharging.

Technical Parameters

Tare scope	Maximum load capacity: 100% of rated load
Initial zero range	±20% of maximum capacity
Manual zero range	±40% of maximum capacity
Zero tracking range	0.5e
Back to zero range	5e
Zero range	0.25e
Over voltage alarm	7.5V
Low pressure tip	5.6V
Undervoltage shutdown	5.4V

Important Usage & Safety Precautions

1. Ensure the crane hook is correctly and centrally positioned in the crane scale lifting ring. The load must be suspended from the centre of gravity.
2. The crane scale must not be subjected to strong impacts or shock loading.
3. Before use, check all components, screws, and plugs. Ensure nothing is loose or damaged. If issues are found, correct them before powering on.
4. When not in use, store the crane scale in a dry, well-ventilated area, keep it suspended or properly stored, and switch off the power.
5. Before initial use or after long storage, the battery should be charged for at least 8 hours.
6. Do not use the crane scale outdoors during thunderstorms or lightning conditions.
7. To ensure safety and protect the internal structure, lift heavy objects vertically and smoothly. Do not push or force the crane scale body sideways during lifting.
8. When charging, ensure the charger connections are secure and in good condition.
9. To ensure accurate measurements, allow the electronic crane scale to warm up for 10–15 minutes before use.
10. When lifting objects, ensure the load remains balanced and rises steadily.
11. Always lift loads along the same vertical line to prevent swinging or side loading.
12. Do not lift loads at an angle.
13. Do not exceed the maximum rated capacity of the crane scale.
14. If the crane scale is not used for an extended period, power it down completely.
15. Avoid subjecting the crane scale to continuous stress or prolonged overload, as this may shorten the service life of the load sensor.
16. When weighing loads such as steel pipes or elongated objects, ensure the load is stabilised and allow sufficient time for the electronic crane scale reading to stabilise.
17. When a low-voltage warning is displayed, recharge the battery immediately.
18. Each charging cycle should be no less than 10 hours to ensure full battery recovery.
19. When not in use, store the electronic crane scale in a dry environment.
20. It is recommended that the electronic crane scale be checked and verified every six months to ensure weighing accuracy.
21. The message “OUEF” indicates overload (exceeding rated capacity).

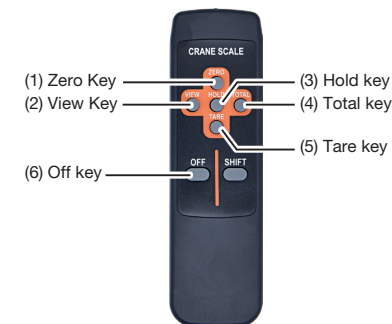
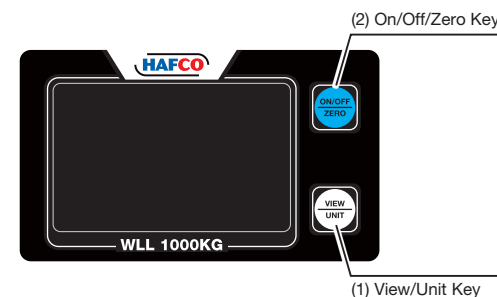
Calibration

Remote Control Buttons	Function	According to	Instructions
Long press [hold key]	Enter parameter settings / password mode	<i>P****</i>	Accesses parameter settings menu
Direction keys	Enter password	<i>P----</i>	Enter 4-digit password
Short press [HOLD Key] to confirm; Short press [ZERO Key] / [TARE Key] to adjust values	The maximum weighing capacity	<i>00000</i>	You can enter any value
Short press [hold key] to enter	Zero weight	<i>L o R d 0</i>	Scale powered on with no load
Short press [hold key] to confirm	Zero code	<i>12345</i>	
Short press [hold key] to enter	The calibration weight	<i>L o R d 1</i>	Apply calibration weight
Short press [hold key] to enter; Short press direction, [key to open] input values	Calibration weight value	<i>00000</i>	You can enter any value
Short press [Hold key]	End of automatic calibration	<i>E n d</i>	

Charging Instructions and Methods

- This product uses a maintenance-free rechargeable battery (DC 6 V, 4.5 Ah) and supports USB charging. This crane scale unit is designed for use with the specified rechargeable battery only (DC 6 V, 4.5 Ah). Do not install non-rechargeable or incorrect battery types in the crane scale unit, as this may result in charging failure, battery leakage, overheating, damage to the product. Only use the supplied USB charging cable and approved rechargeable battery specified by the manufacturer. Before charging, ensure the battery is correctly installed and inspect the charging cable and battery compartment for any signs of damage. Do not attempt to charge damaged batteries or operate the crane scale if the battery compartment shows signs of corrosion, swelling, or overheating
- When the low-voltage indicator is displayed, the battery should be recharged promptly. Continued operation at low battery levels may negatively affect battery performance and service life.
- In the event of severe battery depletion, the crane scale will automatically power off to protect the battery. In this case, the unit should be charged immediately. If the battery has been deeply discharged, allow the unit to charge for more than 5 hours or until the charging indicator shows green.
- If the display does not function normally after charging, this usually indicates battery failure. In this case, it is recommended that the battery be replaced.
- Regular charging helps extend battery life and ensure reliable performance. It is recommended that the crane scale be charged at least once per week, even when it is not used frequently, and charging should not be less frequent than once per month. Always use the specified charger for this product to avoid damage. Overcharging or using an incorrect power supply may negatively affect battery performance, reduce battery life, and shorten overall charging efficiency.

The Keyboard



Working Mode	The Keys		The Keys	Function
Weighing Model	The Main Board	[On/Off/Zero key]	Short press	Zero
			Long press	Power ON/OFF the scale
		[View/Unit key]	Short press	Total accumulation
			Long press	The query
	Remote Control	[Zero key]	Short press	Resets displayed weight to Zero
		[View key]	Long press	Enters Query Mode
		[Hold key]	Short press	Holds the displayed weight on screen
			Long press	Enters Password/Settings Mode
		[Total key]	Short press	Adds displayed weight to total accumulation
		[Tare key]	Short press	Activates Nett Weighing/Tare Function
[Off key]	Long press	Powers OFF the crane scale		
Query Mode	Remote Control	[View key]	Short press	Exits Query Mode
		[Hold key]	Long press	Resets accumulated total
		[Total key]	Long press	Removes stored accumulated value
		[Zero key]	Short press	Scrolls through stored values
		[Tare key]	Short press	Scrolls through stored values
Password Model Parameter Calibration	Remote Control	[Zero key]	Short press	Increases parameter value/moves cursor left
		[View key]	Short press	Selects flashing digit
		[Hold key]	Short press	Confirms parameter / moves to next setting
		[Total key]	Short press	Moves to next flashing digit
		[Tare key]	Short press	Reduces parameter value
		[Off key]	Short press	Confirms decimal point selection
		[Off key]	Long press	Exits calibration mode

Boot Process

- (1) Press the POWER button — the unit emits a startup beep
- (2) The system self-check
- (3) System / load cell stabilisation on power-up
- (4) The battery voltage detection, the voltage display
- (5) The initial boot zeros
- (6) The state of weighing

Parameter Settings

Remote Control Buttons	Function	According to	Instructions
Long press [hold key]	Enter parameter settings / password mode	P****	
Direction keys	Adjust password digits	P - - - -	A 4-digit password must be entered to access parameter settings
Short press [hold key] to enter; Short press [reset button] / [modify Tare key]	Scale division / graduation selection	d 2	Scale division / graduation optional: 0.001, 0.002, 0.005, 0.01, 0.02, 0.05, 0.1, 0.2, 0.5, 1, 2, 5, 10, 20, 50
Same as above	View	o F F 5	Automatic shutdown time optional: never shut down, for 5 minutes, 1 minute, 15 minutes, 30 minutes, 60 minutes
Same as above	Zero	5 L P 5 B	Standby sleep time optional: never sleep, 5 seconds, 10 seconds, 15 seconds, 30 seconds, 60 seconds
Same as above	Enter the query mode	L U 2 B	Low luminance optional: 1, 2, 3
Same as above	Strength of the filter	F L 1	Optional filtering strength: 0 the weakest, 1, 2 medium
Short press [hold key] to enter; Short press the direction key, [Off key] Input values	Gravity calibration value (m/s ²)	9 . 7 9 m/s ²	You can enter any value
Short press [hold key]	Exit the parameter settings	E n d	

The Main Technical Performance

Using temperature range - 10°C~+40°C Relative humidity: 85% RH or less

Digit height: 30mm (5-digit display) Safety overload: 150%F.S

Overload: F.S as much as 200% Accuracy class: Level III

Stability: reading <5S

Electronic Crane Scale Basic Parameters

The Biggest Weighing Max. Cap. (kg)	The Small-est Weighed Min. Cap. (kg)	Scale division (d)/ Graduation	Number of Scale Divisions (n)	The Biggest Weighing Max. Cap. (kg)	The Small-est Weighed Min. Cap. (kg)	Scale division (d)/ Graduation	Number of Scale Divisions (n)
50	0.4	0.01	2500	3000	20	0.5	3000
100	1	0.02	2000	5000	40	1	2500
200	2	0.05	2000	10000	100	2	2000
300	2	0.05	3000	15000	100	5	3000
500	4	0.1	2500	20000	200	5	2000
1000	10	0.2	2000	30000	200	5	3000
2000	20	0.5	2000	50000	400	10	2500

Charging Indicator

When the battery voltage drops to 5.6 V, the LED display will indicate that charging is required.

When the battery voltage reaches 5.2 V, the power supply will automatically shut down to prevent excessive battery discharge and protect battery life.