USER MANUAL

OCS-T

Crane Scale

Please take time to read these instructions before starting to use the scale



Please keep the Technical manual at hand and follow instruction for use.

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Thank you for purchasing a Marsden Weighing Machine Group Ltd industrial scale.

Product Specification

Model	OCS-T	
Capacity / Graduation	3000 kg Capacity	± 1 kg
	5000 kg Capacity	± 2 kg
LCD Screen	1.4-inch (35mm) LED screen (5 digits)	
Units of Measure	kg	
Function Keys	On / Off, Zero, Tare, Hold	
Operation Environment	-10℃ ~ +40℃ 10℃ ≤ 90%	
Power Supply	6V/4.0Ah lead acid rechargeable battery Charger: 100~220VAC 50/60Hz input, 7.2VDC/1000mA output	
Capacity / Graduation	3000 kg Capacity	11.0 kg
	5000 kg Capacity	12.5 kg
Stable Time	≤ 10 sec	
Tare Range	100% F.S.	
Zero Range	4% F.S.	
Overload	100% F.S. + 9e	
Safety Load	150% F.S.	
Ultimate Load	400% F.S.	
Optional Accessories	Remote Controller, Handheld Indicator, Big Score Display	

Dimensions

All measurements are in mm.

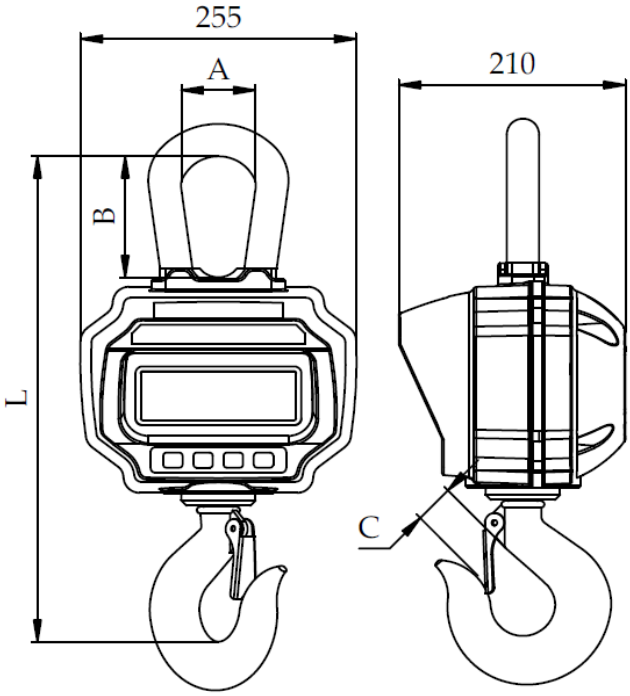


FIGURE 1: OCS-T Measurement Diagram

	A	B	C	L
3000 kg Capacity	68 mm	112 mm	40 mm	420 mm
5000 kg Capacity	68 mm	112 mm	45 mm	150 mm

Safety Guide

For good performance and precise measurement, be careful with daily operation and maintenance.

	Do NOT overload scale. This will damage loadcell and void warranty
	Do NOT leave load hung on the scale for long. This will decrease scale's accuracy and shorten loadcell's life
	Inspect shackle and hook before using. Check clips, pins and screws regularly.
	Check battery frequently. When scale runs out of power, charge battery with its dedicated charger
	Rotate load rather than scale if needed
	Do NOT use scale under thunder or rain
	Hang scale on shelf in dry and well-ventilated room. Do NOT place scale on the ground directly
	Do NOT attempt to repair scale yourself. Contact your local representative

Safety Guide

This scale is a combination of sound and proven mechanical design, with today's most advanced electronics to provide a superb feature set. It is versatile, reliable, accurate and easy to operate.

☑	Superb Quality. Strictly in accordance with OIML R76, Chinese GB/T11883-2002 national standards, and European CE directives
☑	Great Safety. Aluminum-casting case, high firm hook and shackle, dedicated weighing loadcell for safety installation.
☑	Strong Reliability. Cutting-edge technology, quality integrated circuit for high performance and long time stability
☑	Broad Applicability. Popular and applicable in storage, textile, metallurgy industry, and so forth
☑	Easy to Use. Ultra-red remote controlling design. Easy to operate on the scale or in distance
☑	Complete Function. Resolution switch, unit conversion, auto power-off, battery inspection, etc

Display & Keys

Scale Keys

Key	Name	Function
	On / Off	Press 1s to power on/off scale. Return to weighing mode.
	Zero	Manual Zero. Increase flashing digit.
	Tare	Tare in/out. Right scroll flashing digit.
	Hold	Lock/unlock reading. Confirm.

Remote Keys

Key	Name	Function
	Zero	Same as .
	Tare	Same as .
	Hold	Same as .
	Acc.	Accumulate weight. Decrease flashing digit.
	Del.	Delete last weight. Clear all weight. Left scroll flashing digit.
	F1	View. Input decimal point.
	F2	Unit switch.
	Off	Press 1s to power off. Return to weighing mode.
	2nd	2nd function.

Indicators

LED	Name	Note
STB.	Stable	lit when weight is stable
ZERO	Zero	lit when weight is at zero
TARE	Tared	lit when scale is tared
HOLD	Hold	lit when scale is locked
lb	lb	lit when unit is lb
kg	kg	lit when unit is kg

Message

Message	Stand for	Note
-----		detect weight
?		in Idle Mode
Setup	SETUP	User Setup Menu
Bat??	BATtery	battery life percentage
P0000	Password	in Password Mode
end	END	save and exit
2nd	2ND	2nd function
err	ERRor	invalid operation
acc	ACCumulate	accumulate weight
del	DELete	delete last weight
Clr	CLeaR	delete all weight
2nd	2ND	2nd function

Operations

Power On / Off

☑	Press  for 1s to power-on scale. The scale will perform an initialization and power-on test, ***** shows twice, then capacity 5000 shows, battery life percentage bat90 shows, weight detection -------- shows and then auto zero.
	For information about Auto-Zero, refer to Scale Configuration in Technical Manual.
☑	Press  or  for 1s to power-off scale. Battery life percentage bat90 shows, off message ***off*** shows, and then cut off power.

Zero

☑	Press  or  to zero. ZERO light on
ⓘ	If load is in motion, or tared, or out of Manual-Zero Range, ***err*** shows.
	For information about Manual-Zero Range, refer to Scale Configuration in Technical Manual.

Tare In / Out

☑	In gross mode, press  or  to tare in. TARE light on.
ⓘ	If load is in motion, or negative, or out of Tare Range ***err*** shows
	Tare will reduce the apparent overload range of scale. For example, if a 5000*2kg scale has a 1000kg container as its tare, the scale will overload at a new weight of 4018kg (5000 – 1000 + additional 9 divisions).
☑	In net mode, press  or  to tare out. TARE light off.

Lock / Unlock

☑	Press or  to lock screen. HOLD light on.
☑	Press or  to unlock screen. HOLD light off.

Accumulate

☑	Press  to accumulate current weight.
🗒	***acc*** shows, indicating weight is accumulated. Scale uses displayed weight, so gross or net weight is added into the same accumulator.
ⓘ	If load is in motion, or negative, or does not return to zero before, ***err*** shows.

View

☑	Press  to enter View mode
🗒	Display flashes accumulated weight.
☑	Press  or  to view high 5-digit or low 5-digit.
☑	Press  or  to exit View mode

Delete Last Weight

☑	Press  to delete last accumulated weight
🗒	***del*** shows, indicating last accumulated weight is deleted. Delete function only deletes the last weight
ⓘ	If last accumulated weight has been deleted, ***err*** shows

Clear All Weight

☑	Press  first and then press  to clear all accumulated weight.
📝	*clr* shows, , indicating all weight is cleared

Unit Switch

☑	Press  to switch unit in between kg, lb, and User Unit
📝	When unit is kg, kg LED light on. When unit is lb, lb LED light on. When unit is User unit, kg and lb LED all light off
📝	For more information about User Unit, refer to Scale Configuration in Technical Manual

User Setup

☑	Press  first and then press  or  to enter User Setup menu. ***setup*** shows

Auto-Off Timing

☑	Press  or  to enter Auto-Off Timing. ***off??*** shows.
☑	Press  or  and  to change timing value
	Auto-Off Timing can be set to: *0* (disabled), *5* (5min), *10* (10min), *15* (15min), *30* (30min), *60* (60min). It is disabled by default
	Auto-Off function maximizes scale's battery life against people's carelessness not to power off scale when it's not working. Auto-Off starts countdown timer when there's no action or load is stable. Any key pressing or motion in load restarts countdown timer

Display Brightness

☑	Press HOLD or ▢ to enter Display Brightness. ***br ?*** shows
☑	Press ZERO or ⌂ and ⌄ to change brightness value
↳	Display Brightness can be set to:***1*** (dim), ***2*** (normal), ***3*** (bright).
🗒	Dim LED brightness saves battery power dramatically

Idle Mode Timing

☑	Press HOLD or ▢ to enter Idle Mode Timing. ***idl??*** shows
☑	Press ZERO or ⌂ and ⌄ to change timing value
↳	Idle Mode Timing can be set to: *0*(disabled), ***5*** (5sec), ***10*** (10sec), ***15*** (15sec), ***30*** (30sec), ***60*** (60sec). It is 30sec by default
🗒	To maximize battery life, scale automatically enters Idle Mode, when there's no action or the load is stable. In Idle Mode, scale works in low-power consumption status. Any key pressing or motion in load wakes up scale from Idle Mode
☑	Press HOLD or ▢ to exit User Setup

Battery Maintenance

To maximize battery life, please note the following battery maintenance guide.

ⓘ	This scale is powered by a 6V4.0Ah rechargeable lead-acid battery
ⓘ	Battery is permanently fixed inside battery house
ⓘ	Depending on LED brightness and idle mode setting, battery works from 60 hours to 200 hours
ⓘ	In order to conserve battery life, enable Auto-Off and Idle Mode, dim LED brightness
ⓘ	Charging time for a completely discharged battery is approximately 12 hours.
ⓘ	To obtain maximum service life, battery should be stored between -20℃ (-4℉) and +50℃ (122℉). Stored batteries should be recharged every three months
ⓘ	During charging, green LED indicates full of power, while red indicates that charging is going on

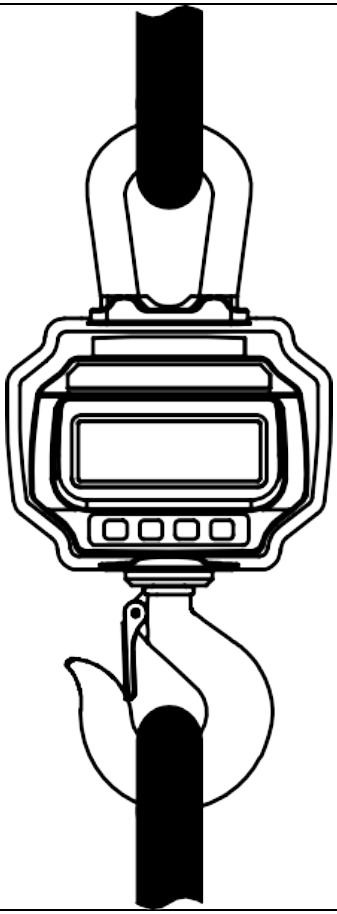
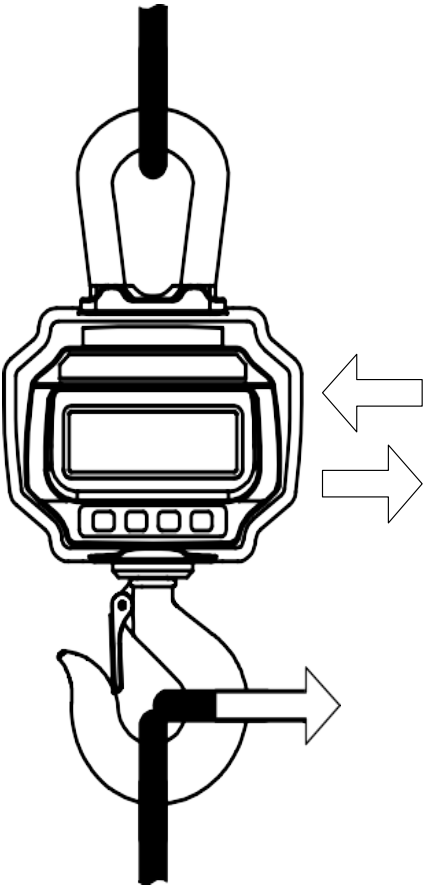
Troubleshooting

Simple problems can be resolved as below listed solution. If problems still exist, please contact your local representative

Symptom	Possible Cause	Suggested Solution
Not powering on after On / Off is pressed	Discharged / defective battery	Check battery and charge
	Defective On / Off key	Press harder and keep pressing 2s
	Defective power cable	Open front panel, check power cable
	Defective mainboard	Contact representative
Display flashes	Discharged battery	Charge battery
No action taken after key pressed	Scale is disturbed	Re-plug power cable
	Defective key	Contact representative
Weight	Load in motion	Keep load stable
Reading not stable	Weak Anti-Motion	Change Anti-Motion level
	Damped loadcell or mainboard	Dry loadcell or mainboard
	Defective mainboard	Contact representative
Weight reading not zero when no load	Discharged battery	Charge battery
	Load-cell stressed too long	Hang scale in storage
	Discharged battery	Charge battery
Large error in weight reading	Scale not zeroed before applying load	Manual Zero scale before loading
	Wrong unit	Switch to correct unit
	Scale requires calibration	Calibrate scale
	Defective loadcell or mainboard	Contact representative

Battery can not be recharged	Defective charge board	Contact representative
	Defective battery	Contact representative
Short remote controlling distance	Discharged / defective remote battery	Replace remote controller batteries

Loading Procedures

DO NOT attach oversized interface	DO NOT push / pull on loaded scale or directly on hook
	

DO NOT use multiple attachments	Use hardware that creates single point attachments
