



# RIG-MATE

Electronic Crane Scale

# USER GUIDE



**A. NOBLE & SON LTD.**  
[www.nobles.com.au](http://www.nobles.com.au)



WORLD RECOGNISED  
**ACCREDITATION**

**NATA Calibration  
available on request**



## **IMPORTANT**

Thank you for choosing a Nobles RIG-MATE crane scale. To ensure a long and trouble free service life please read this manual carefully before operation.

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## **SAFETY GUIDE**

***Please read the following instructions and advice before using the RIG-MATE crane scale.***

- Overloading is strictly prohibited.
- Continued and prolonged loading will decrease the accuracy and shorten the life of the Crane Scale.
- Check the shackle and hook prior to use to ensure there are no signs of overloading such as deformation, cracks or excessive corrosion.
- Check the battery voltage and re-charge the battery as required.
- Only use the recharger supplied with the unit.
- Do not disassemble the unit or try and repair it if a fault occurs, return the unit to A. Noble & Son Ltd. for repair.

## **PRODUCT FEATURES**

- 30mm LCD display
- Manual or Remote Operation
- Easy to replace lead-acid battery and AC to DC power adaptor/recharger
- 6V/10Ah rechargeable battery included
- Infrared remote controller with operating distance of 20m

### **Display Functions**

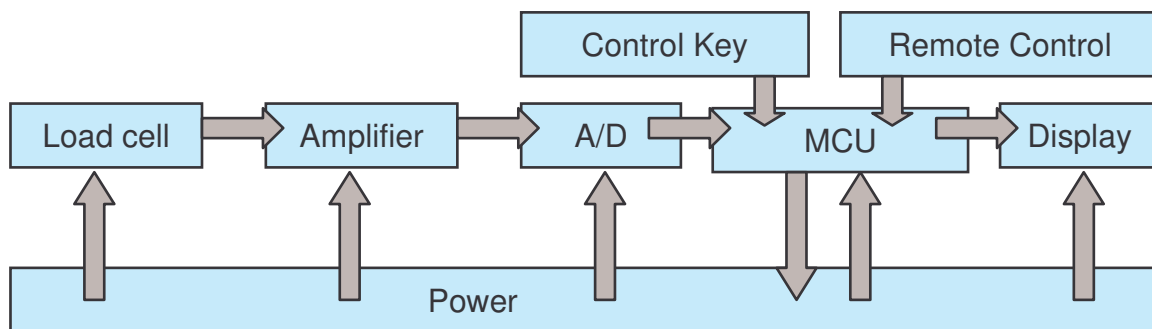
- Load/weight - hold, tare, accumulation, kg/lb conversion, gross/net conversion



## PRODUCT SPECIFICATIONS

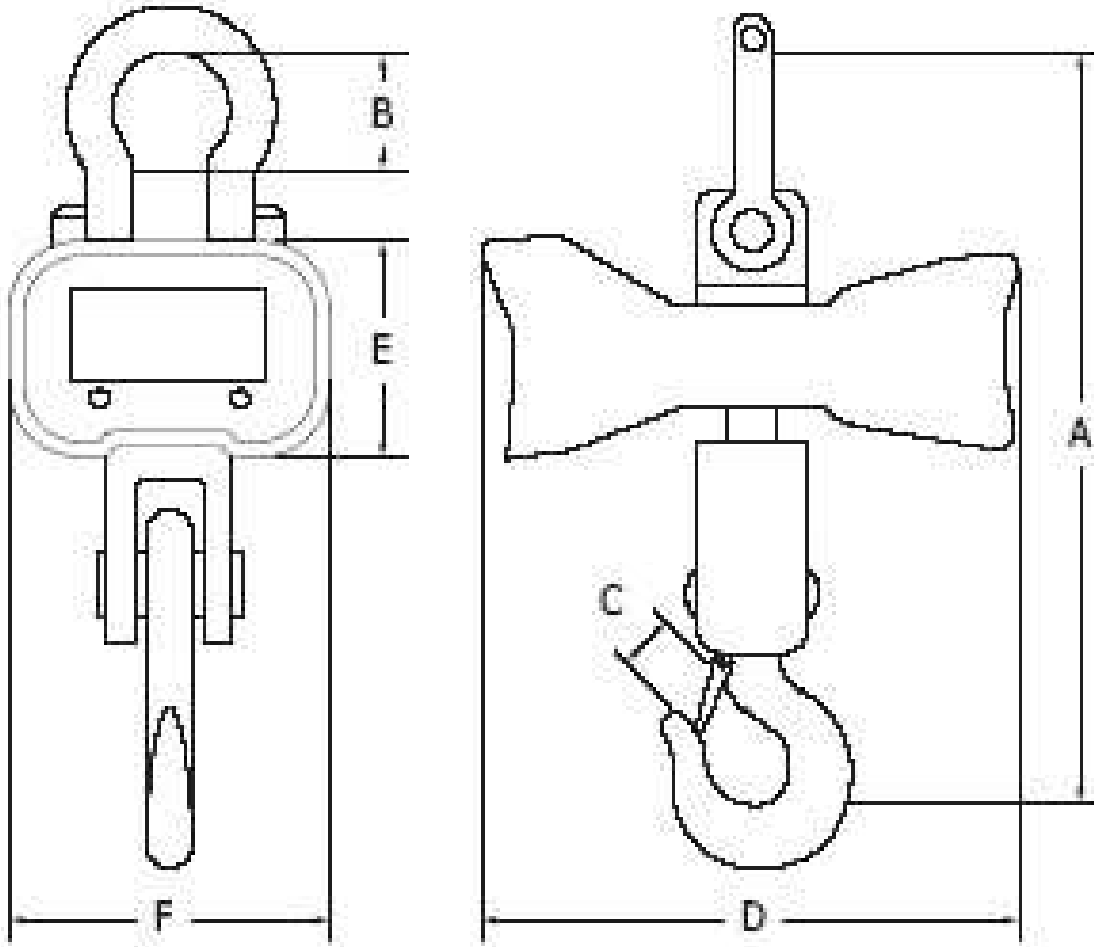
Display	30mm, 5 digit LCD
Display Increments	2,000 kg = 1 kg 5,000 kg = 2 kg 10,000 kg = 5 kg
Tare Range	Full Capacity
Stable Time	< 10 seconds
Overload Indication	100% Max. Capacity
Max. Safe Load	125% Max. Capacity
Ultimate Load	400% Max. Capacity
Operation Time	60 hours Minimum 100 hours Maximum (depends on operation mode)
Battery Type	Fully Sealed lead-acid battery, 6V/10Ah
Charger	DC9V/1500mA
Operating Temperature	-10°C + 40°C
Operating Humidity	< 85% RH under 20°C
Batteries in Remote Control	AA Batteries, 1.5V x 2

## SCHEMATIC DIAGRAM





## DIMENSIONS & WEIGHTS



Stock Code	Capacity (kg)	A (mm)	B (mm)	C (mm)	D (mm)	E (mm)	F (mm)	Net Weight
TRRMCS02000	2,000	420	65	35	360	155	230	12 kg
TRRMCS05000	5,000	730	100	55	360	155	230	24 kg
TRRMCS10000	10,000	850	120	70	360	155	230	44 kg



## OPERATION GUIDE

### Turning ON

Press the button



OFF/ON

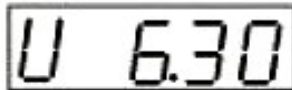
Display will read:



Flashes



Maximum capacity is displayed



Current battery voltage is displayed



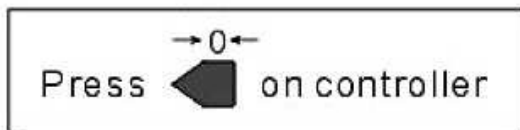
Waits for stable signal



Green "Steady" light is illuminated.

*The unit is now ready for operation*

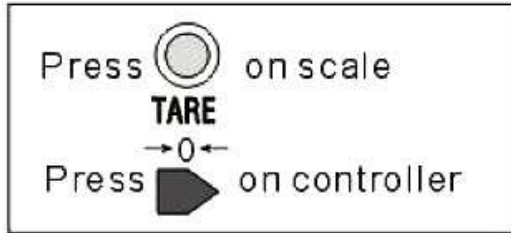
### Zeroing



"0" shows after turning the scale on. You can also press the "0" button on the remote control



## Tareing

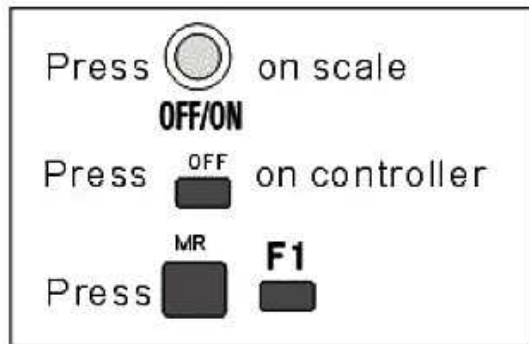


120

0

After hanging any rigging on the scale press the TARE button to subtract the weight of the rigging from the overall load. The red tare light will illuminate

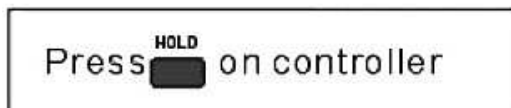
## Battery Checking



U 6.30

The voltage should be higher than 5.8V

## Load/Weight Holding



2530

After the reading is stable press the HOLD button. A square indicator dot will appear in the top left hand corner of the display. Press hold again to resume the reading

## Low Power Warning

-Lb-

When the battery voltage is lower than 5.8V the display will flash. The scale will continue to work until the “-Lb-” is displayed which is followed by an automatic power off 1 minute afterwards. Battery recharging is then required.





## Overload Warning



The “-oL-” is displayed when the load (tare+net) exceeds the rated capacity of the scale. The scale SHOULD NOT be overloaded as this could cause damage to the scale and increase the possibility of the scale failing.

## Power Saving





The “-“ is displayed when the weight/load on the scale has not changed for a 15 minute period. The load display resumes when the weight/load changes. The scale will also automatically power off when the weight/load on the scale has not changed for 60 minutes.

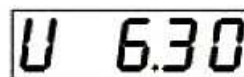
## Battery Recharging

1. Turn off the scale. Connect the adaptor to 220-240V AC power supply and attach its connector into the socket at the rear of the scale. When the indicator turns from green to red charging is completed. Recharging time should not exceed 8 hours but the scale is fitted with over-charging protection so excessive charging will not damage the battery.
2. If the scale needs to work non-stop a spare battery pack may be required to facilitate immediate battery changing and minimise charging down time.

## Turning OFF

Press  on scale for 3 seconds

Press  on the controller for 3 seconds



Battery voltage is displayed



Is displayed for 2 seconds before power off



## CARE IN USE

### **SAFETY WARNING**

- Never overload the crane scale
  - Do not lift loads over people
  - Do not stand or walk under a lifted load
  - Do not try to swivel the load with the standard crane scale hook and shackle. If a load is required to swivel then an approved swivel must be incorporated in the rigging system or the standard eye hook must be replaced with an approved swivel hook
  - Always ensure the scale is loaded evenly and in line through the top shackle to the bottom hook, if loading is not in-line this will place excessive forces on the S type load cell and could result in a dangerous situation
- 
1. For optimum performance and to ensure a long service life the scale should be treated with care.
  2. When not in use the scale should be hung in a dry and well ventilated area.
  3. Do not leave the scale on the floor for extended periods of time
  4. The scale should be cleaned periodically to stop the built up of dust and other contaminants.
  5. Do not use the scale in the rain, the scale is designed primarily for indoor use and will not tolerate excessive rain or moisture.
  6. Even loading will ensure accurate readings, avoid shock loading of the scale.



## DISPLAY FUNCTIONS

-----	Scale waiting for stable signal
Ecr 10	Accumulation weight does not exceed minimum capacity
Err 11	Accumulation exceeds 30 times
Err 12	Accumulation exceeds 99999
Err 13	Accumulation is repeated, multiple accumulation will not function
CLr	Confirms accumulation clearance
noCLr	Cancel accumulation deletion
88888	Confirm accumulation deletion
noACC	No accumulation
SHIFT	Switch to different mode
U 6.30	Battery voltage
SCALE	Calibration
SETUP	Parameter setting
U Adj	Battery adjustment

Other display modes are Overload, Low Power Warning, Power Saving Mode and Power Off as described in OPERATION GUIDE.



## TROUBLESHOOTING

PROBLEM	POSSIBLE CAUSE	SOLUTION
No display on power up	Battery is damaged	Check the battery
	Battery is not connected	Connect the battery
Display flashes	Low battery power	Re-charge the battery
Cannot turn on or off	ON/OFF button damaged	Check and or clean ON/OFF button
Cannot zero	Zero button is damaged	Check and or clean Zero button
Recharger indicator does not come on	Defective recharger or recharger not connected	Check the recharger and the plug
Unstable display	Load is in motion	Stabilise the load
	Overload or defective load cell	Check or replace the load cell
	Scale is damp	Keep the scale in a dry environment
The display does not show zero when there is no load	Load cell not yet ready to work	Wait 3-5 minutes after power on
	Load is not placed correctly	Scale should be suspended by top shackle
Cannot recharge	Defective battery	Replace the battery
	Defective recharger or connector	Check or replace the recharger
Short remote distance	Remote receiver not functioning correctly	Check and or clean the receiver
Remote not functioning	Remote batteries are flat	Replace the AA batteries in the remote

## REMOTE CONTROL OPERATIONS

### Zero

<i>Operation</i>	<i>Display Function</i>
( 0 )	Set "0" when no load is on the scale



## Operations

<i>Operation</i>	<i>Display Function</i>
<b>( TARE )</b>	Red TARE light illuminates, press again to show gross weight/load
<b>( MR ) ( M + )</b>	If these two buttons are pushed in order (from left to right) you will enter your accumulation data.
<b>( CLEAR ) ( MR )</b>	Clears your memory, in other words all your past accumulations will be deleted after pressing these two buttons in order.
<b>TARE</b>	This is your scroll button when you are inside the accumulation data memory. By continuing to press 'TARE', it will eventually scroll to the total accumulation value.
<b>M +</b>	This is your memory button. When pressed it will memorise the current load on your Rig-mate crane scale.
<b>MR</b>	By pressing this button in normal mode, you will cause your Rig-mate crane scale display to show 'SHIFT' on screen. If you press 'M +' after that message it will show your accumulation memory.
<b>Note:</b>	The user will not be able to save the same load value twice. The load will have to be lifted twice, not just saved twice on the same lift. Therefore the user will only see 'SAVE' displayed once on the screen per each lift.

## Clear

<i>Operation</i>	<i>Display Function</i>
<b>( CLEAR )</b>	Confirms deletion of accumulation value

## Hold

<i>Operation</i>	<i>Display Function</i>
<b>( HOLD )</b>	Holds the weight, press again to resume



## Voltage Display

<i>Operation</i>	<i>Display Function</i>
( MR ) ( F1 )	Display current battery voltage

## Power Off

<i>Operation</i>	<i>Display Function</i>
( OFF )	Displays current battery voltage and powers off



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