

OPTIMA SCALE

OPF-C Counting Scale USER'S MANUAL



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FEATURES

- Provides the highest level of counting accuracy
- 30,000 displayed resolutions
- 3 displays - Weight - Unit Weight - Count
- Truly portable - with both AAC adapter and rechargeable battery that lasts 100 hours
- Large removable anti-static stainless steel weighing pan
- Durable ABS housing
- Warning for insufficient unit piece weight and sample size
- Large high contrast back-lit liquid crystal display (LCD)
- Splash proof keyboard and display
- Calibration with reference weights
- Optional RS-232c for bi-directional communication with a PC or Printer
- Multiple weighing units: g, kg, lb, oz
- 1 year limited warranty

CONTACT US

Please e-mail sales@optimascale.com for any sales related question

Please e-mail support@optimascale.com for any support related questions

Don't forget to visit our website at:

optimascale.com

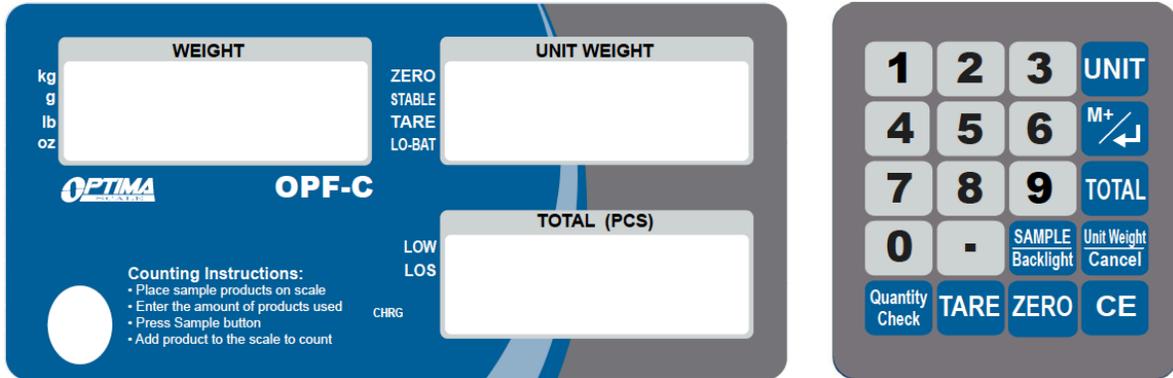
SAFETY PRECAUTIONS

- To avoid damaging the battery do not keep charger plugged in once battery is fully charged.
- Only use the provided adapter to charge this unit.
- The provided battery should be replaced when it no longer holds a charge of over 12 hours.
- Avoid installing the balance in direct sunlight. This may cause poor performance or malfunctions.
- If the balance will not be used for a long period of time, remove all batteries from the battery compartment to avoid leakage, which may cause damage to the instrument.
- Avoid overloading or dropping material onto the platform as that may damage the balance.
- Please clean the display and operation panel with a wet cloth.
- Place the weight on the center of the pan for accurate weighing. Make sure the weight is not over the Max capacity as it could damage the load cell inside.
- Do not spill liquids on the balance as it is not water-resistant. Liquids may damage the case and any liquid inside may cause damage to the electronics.
- Material that has a static electric charge could influence the weighing. Discharge the static electricity of the samples, if possible. Another solution to the problem is to wipe both sides of the pan and the top of the case with an anti-static agent.

PREPARATIONS & SET UP

- Place your balance on a stable and level table. Then level your balance by adjusting the feet to center the bubble in the spirit level (located under the plate)
- Plug into a wall outlet to avoid interference with other wirings
- Turn on the balance while there is no load on the pan
- We suggest to warm-up the balance by turning the power on 5 minutes before use for accurate weighing
- Calibration may be required before weighing when the balance is initially installed or moved from a location

DISPLAY AND KEY DESCRIPTION



- UNITS**

In the weighing mode there are 4 units available (kg, g, lb, oz)
- M+ /**

In accounting mode: Accumulate counting
 In setting mode: save settings and shift to the next function selection
- TOTAL**

Check the total accumulation in the weighing or counting mode
- UNIT WEIGHT**
 Cancel

In weighing mode: setting the unit weight data
 In setting status: exit key
- SAMPLE**
 Backlight

In counting mode: setting the quantity sample used for counting
 In weighing mode: used to set the backlight function
- CE**

Clear inputted data in the weighing mode
- ZERO**

In weighing mode: return to 0
 In setting mode: decreases the value
- TARE**

In weighing mode: Tare's balance and shows net weight
 In setting mode: increases the value
- QUANTITY CHECK**

This is for setting an upper and lower limitation alarm
- 1**

●

Number keys

OPERATING INSTRUCTIONS

Power On

- Turn on the power by flipping the switch located on the underside of the scale to the right. Once on, the scale will show the voltage and auto-check by counting down from 0-9 sequentially

Zeroing

- If the screen reads any number other than 0 before weighing, press the ZERO key to set to 0 (be sure ◀ points to ZERO)

Note: The zero range is 4% max capacity

Unit Selection

- To switch between measuring units (kg, g, lb, oz) press the [UNITS] key

Tare Function

- Put a container you wish to use on the pan, then press the [TARE] key and the display will show ▼ pointing to TARE and reset back to 0
- Add your sample to the container to weigh without the weight of the container
- To exit Tare mode simply press [ZERO] key

Note: If you remove your container the scale will show the minus weight of the container

Sample Setting (Setting the sample weight)

There are two ways of setting a sample weight

Number Setting: for when you don't know the weight of the object

- Press [CE] for canceling the previous unit weight and sample setting
- Place objects on the scale
- On the keypad enter how many objects you placed on the scale
- Then press the [SAMPLE] key
- The scale will calculate and then show the number of your sample on the third line
- You can now add objects to the scale and it will count them

Unit Weight Setting: for when the weight of the unit is already known

- Press [CE] for canceling the previous unit weight and sample setting
- On the keypad enter the weight of your object then press the [UNIT WEIGHT] key. Add objects for scale to count

Accumulation

- Accumulation mode keeps track and adds your total pieces together for you
- With nothing on the scale press [CE]
- Place your sample on scale
- Enter the amount of pieces your sample is
- Press [Sample]
- Now add to the scale the first weight you want accumulated
- Then press [M+] to save the first weight
- The screen will show 10 . 01 and the piece count
- Press [Unit Weight] to save the first weight
- The scale will beep once
- Now add your second weight you want to accumulate to the scale
- The weight and piece count will show
- Once stable the scale will beep, then press [M+]
- The screen will show 10 . 02 and the total piece count
- Then press [Unit Weight] to save the second weight
- Now add your third weight you want to accumulate to the scale
- The weight and piece count will show
- Once stable the scale will beep, then press [M+]
- The screen will show 10 . 03 and the total piece count
- Then press [Unit Weight] to save the third weight
- Continue these steps until all wanted weights have been accumulated (up to 99 totals can be accumulated)

Accumulation Checking

- When you want to see the total pieces accumulated press [Total]
- The screen will show "total" the number of accumulated weights and the total amount of accumulated pieces
- To clear the saved weights press [CE]

Quantity Check Alarm

- When counting you can set a quantity limit alarm by setting limits
- This function allows you to set an alarm when there are too many or too few pieces on the scale. For example you can set an alarm to go off when you have under 10 units on the scale or an alarm when you have over 100 units, or both at the same time
- Press [QUANTITY CHECK] key to enter the quantity check setting mode
- Turn this function On or Off by pressing the [ZERO] key
- To set a Low alarm press [M+] and enter the amount you want to set as your lower alarm (entering 0 disables low alarm)
- To set a High alarm press the [M+] Key again and enter the amount you want to set as the high alarm (entering 0 disables high alarm)
- Press [M+] again to save the alarms and exit quantity check setting mode

BATTERY

- Charging Light Indication: When the scale is charging the charge light will turn Red. When the battery is done charging the charge light will turn Green. To fully charge the battery plug in for about 12 hours.

ALARMS

Overloading alarm

- When the load on the platform is over 9d of the scale's maximum capacity, a beep will sound to alert you to remove the load from the platform immediately The display will show "EEEEEE"

Sample Number Alarm

- If the total weight of your sample is below limit value, it will indicate lack of sample

Quantity Check Alarm

- When the quantity check function is on and you are over or under the scale's limitation the scale will emit beeps to warn you
 - Short sounding beeps: if the quantity is over the upper limitation
 - Long sounding beeps: If the quantity is less than the lower limitation

TROUBLESHOOTING

"AdL---" - the weight is under the set division

"AdH---" - the weight is over the set capacity, please remove all weight

"Ad-QUER" - the weight is over the scale's capacity, please remove all weight from the scale immediately!

- Please check to see if the plate is in place properly and the scale is level
- If error persists please contact the dealer

When powering on if the display shows "Error Vol 500" before auto-checking, the present voltage is 5.0V and the scale cannot be turned on.

- Charge the scale with the included charger and do not use until the voltage reads 5.3V when you power on the scale
- If error persists please contact the dealer

CALIBRATION

When to calibrate

- When the scale is initially installed
- When the scale's location has changed
- After the scale has not been used for a long period of time

How to calibrate

- In weighing mode, Press [CE] and [Tare] at the same time to enter the dealer settings mode
- The screen should read "-----" Enter the scales 6 digit password (Default password is: 123456)
- Once entered, the left screen will read "Pod"
- On the right screen enter the max capacity of the scale (ex. "15" for 15 kg) and press [M+] to confirm
- On the bottom screen enter the division of the scale (ex. "0.5" for 0.5 kg) and press [M+] to confirm
- The left screen will show "Code" with the current code flashing on the right screen. If you'd like to change your scale's code, enter your new 6 digit code followed by [M+] to confirm
- If you do not wish to change your password simply press [M+]

To Calibrate with 1 weight

- The left screen will read "Lin" and the right will read "0.0"
- Press the [Zero] key to switch Lin to "OFF", followed by [M+] to confirm
- The left screen will read "CAL 1" and the right will flash "0"
- Confirm there is no weight on the pan before entering the weight calibration mode
- Enter the value (in kg) of the weight you will be using to calibrate the scale (2/3rds of the capacity is preferred)
- Then set the weight on the scale and press [M+] to confirm
- Press [M+] again to finish
- The display will flash "PASS" when calibration is done
- Press [UNIT WEIGHT] to go back to the weighing mode
- Calibration is complete

To Calibrate with 3 weights

You will need 3 weights 1/3, 2/3 and 3/3 of the max capacity.

- The left screen will read "L 1" and the right should read "0" (Press the [Zero] key to switch Lin to "0" if it is "FF")
- Then press [Total] to enter segment calibration
- The left screen will read "L 1E 1" and the right will flash "0"
- Confirm there is no weight on the pan before entering the weight
- Enter the value (in kg) of the first weight you will be using to calibrate the scale (1/3rds of the capacity is preferred)
- Then set the calibration weight on the scale and press [M+] to confirm
- The left screen will read "L 1E 2" and the right will flash "0"
- Enter the value (in kg) of the second weight you will be using to calibrate the scale (2/3rds of the capacity is preferred)
- Then set the calibration weight on the scale and press [M+] to confirm
- The left screen will read "L 1E 3" and the right will flash the max capacity
- You must use the weight shown on the screen (max capacity) to finish calibration
- Once the weight is on the scale, press [M+] to confirm
- The display will flash "PASS" when calibration is done
- Press [UNIT WEIGHT] to go back to the weighing mode
- Calibration is complete

SPECIFICATIONS

Max. Capacity	1.5kg	3kg	7.5kg	15kg	30kg
Readability	0.05g	0.1g	0.2g	0.5g	1g
Resolution	1:30,000	1:30,000	1:37,500	1:30,000	1:30,000
Response	3 -5 seconds				
Display	LCD display with backlight				
Tare	Equal to Max capacity				
Over-load alarm	Auto alarm when load is over capacity				
Over-load capacity	Protect automatically when the load is 125% of capacity				
Power Supply	Rechargeable battery: DC6V 4Ah Adapter: AC110-240V Output: 12V/500mA				
Consumption	Work: 70mA Sleep: 35mA				
Temperature	Storage: -10°C ~+50°C (14-120°F) Work: 0°~+40°C (32-104°F)				
Humidity	Storage: 5% ~ 90% R.H. Work: 10% ~ 80% R.H.				
Pan Size	11in x 8.5 in				
Gross Weight	9.5 lbs				

Unit Conversion

1 kg = 1000 g
 1 lb = 453.59237 g
 1 Oz = 28.349523125 g