



PS-C30KN series

Counting Scales

User Manual

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SECTION 1 INTRODUCTION

The PS-C30KN series of scales provides an accurate, fast and versatile series of counting and check-weighing scales.

There are 4 models in this series, with capacities of 3kg, 6kg, 15kg and 30 kg.

They all have stainless steel weighing platforms on an ABS base assembly.

All the keypads are sealed, color coded membrane switches and the displays are large easy to read liquid crystal type displays (LCD). The LCD's are supplied with a backlight.

All units include automatic zero tracking, audible alarm for pre-set weights, automatic tare, pre-set tare and an accumulation facility that allows the count to be stored and recalled as an accumulated total.

SECTION 2 SPECIFICATIONS

2.1 QHC plus series

QHC SERIES				
Model #	PS-C30KN-3KG	PS-C30KN-6KG	PS-C30KN-15KG	PS-C30KN-30KG
Maximum Capacity	3kg	6kg	15kg	30kg
Readability	0.1g	0.2g	0.5g	1g
Resolution	1:30000	1:30000	1:30000	1:30000
Tare Range	-3kg	-6kg	-10kg	-30kg
Minimum	1g	2g	4g	10g
Repeatability	0.1g	0.2g	0.5g	1g
Linearity $\pm$	0.1g	0.2g	0.5g	1g
Units of Measure	kg, lb			

2.2 Common Specifications

Stabilization Time	2 Seconds typical
Operating Temperature	0°C - 40°C / 32°F - 104°F
Power Supply (external)	120 VAC, 60Hz,
Calibration	External
Internal Counts	1 m
Display	3 x 6 digits LCD digital display, 20mm digits
Balance Housing	ABS Plastic, Stainless Steel platform
Pan Size	12" x 9"
Overall Dimensions (w x d x h)	320 x 340 x 125mm / 12.6 x 13.4 x 4.9"
Gross Weight	4.1kg /9lb
Other Features and Specs	accuracy enhancement for parts counting, internal rechargeable battery (~100 hours operation)

SECTION 3 INSTALLATION

3.1 GENERAL INSTALLATION

The scales should be placed in a location that will not degrade the accuracy.

Avoid extremes of temperature. Do not place in direct sunlight or near air conditioning vents.

Avoid unsuitable surfaces. The table or floor must be rigid and not vibrate. Do not place near vibrating machinery.

Avoid unstable power sources. Do not use near large users of electricity such as welding equipment or large motors.

Avoid high humidity that might cause condensation. Avoid direct contact with water. Do not spray or immerse the scales in water.

Avoid air movement such as from fans or opening doors. Do not place near open windows.

Keep the scale clean.

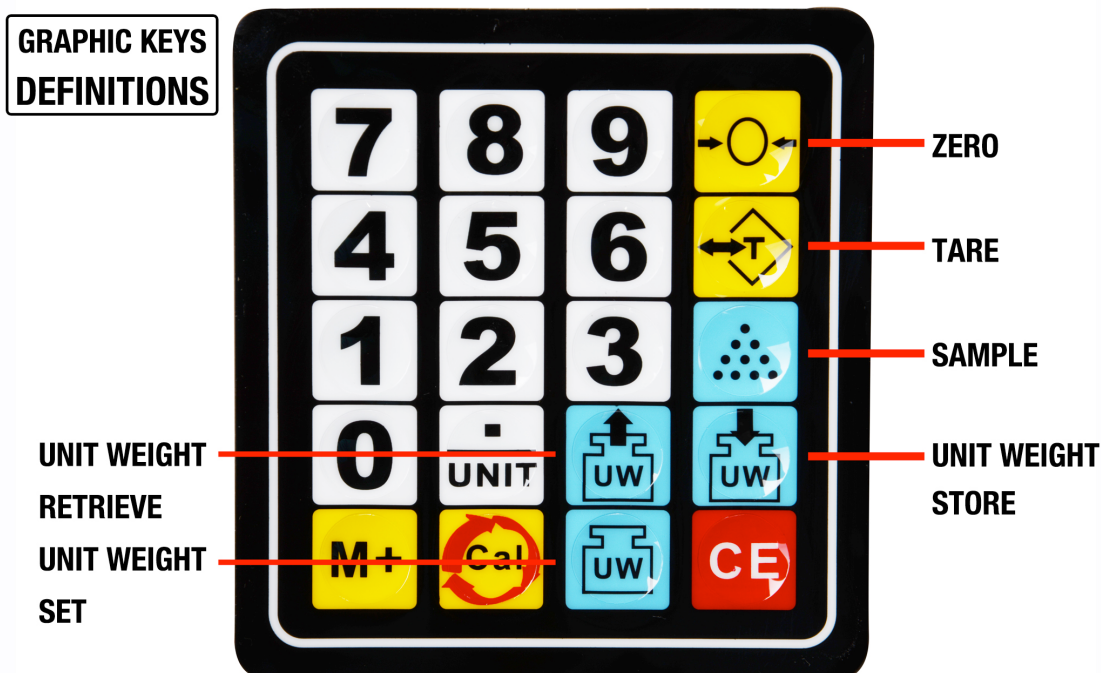
Do not stack material on the scales when they are not in use.

3.2 INSTALLATION of PS-C30KN SERIES

The PS-C30K Series come with a stainless steel platform packed separately. Place the platform in the locating holes on the top cover. Do not press with excessive force as this could damage the load cell inside.

Level the scale by adjusting the four feet. The scale should be adjusted such that the bubble in the spirit level is in the center of the level and the scale is supported by all four feet.

Attach the main cable to the connector on the bottom of the scale. The power switch is located on left side of the base facing downwards.



SECTION 4 KEY DESCRIPTIONS

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Keys	Function
CE	Used to clear the unit weight or an erroneous entry.
0~9	Numeric entry keys, used to manually enter a value for tare weights, unit weight and sample size.
M+	Add the current count to the accumulator. Up to 99 values or full capacity of the weight display can be added.
UNIT WEIGHT STORE	Store the preset unit weight.
UNIT WEIGHT RETRIEVE	Retrieve the preset unit weight.
U. W. SET	Used to enter the weight of a sample manually.
SAMPLE	Used to enter the number of items in a sample.
ZERO	Set the zero point for all subsequent weighing. Zeros the display.
TARE	Tares the scale. Stores the current weight in memory as a tare value, subtracts the tare value from the weight and shows the results (Net weight).
UNIT	Select Kg and Lb units.
CAL	Calibration

SECTION 5 DISPLAYS

5.1 Display map

The scales have three digital displays. The displays show WEIGHT, UNIT WEIGHT and COUNT.

5.2 Weight Display

This display indicates the weight on the scale.

5.3 Unit Weight Display

This display indicates the unit weight of a sample. This value is either entered by the user or computed by the scale. The unit of measure is grams on all scales.

5.4 Quantity Display

This display indicates the number of items on the scale or the value of the accumulated count. See OPERATION section.

On the left of the Weigh display there is an LED to indicate the status of battery charging. When the scale is plugged into the mains power the internal battery will be charged.

If the LED is Green the battery has a full charge.

If the LED is Yellow the battery is being charged.

SECTION 6 BASIC OPERATION

6.1 Zeroing The Display

The **ZERO** key can be pressed at any time to set the zero point (within 4% of power up zero). This is usually only necessary when the platform is empty. When the zero point is obtained, the Weight display will show zero.

The scale has an automatic rezeroing function to account for minor drifting or accumulation of material on the platform. However you may need to press the **ZERO** key to rezero the scale if small amounts of weight are shown when the platform is empty.

6.2 Taring

- a. Zero the scale by pressing the **ZERO** key if necessary. The zero indicator will be illuminated.
- b. Place a container on the platform.
- c. Press the **TARE** key to tare the scale. The tare weight is stored and subtracted from the display, leaving the display reading zero. The "Tare" indicator will be on. As product is added only the weight of the product will be shown. The scale could be tared a second time if another type of product was to be added to the first one. Again only the weight that is added after taring will be displayed.
- d. When the container is removed a negative value will be shown. If the scale was tared just before removing the container, the value shown is the gross weight of the container plus all product that was removed. The zero indicator will also be illuminated because the platform is back to the same condition it was when the **ZERO** key was last pressed.

SECTION 7 PARTS COUNTING

7.1 Setting Unit Weight

In order to do parts counting it is necessary to know the average weight of the items to be counted. This can be done by weighing a known number of the items and letting the scale determine the average unit weight or by manually inputting a known weight using the keypad.

To determine the average weight of the items to be counted it will be necessary to place a known quantity of the items on the scale and then to key in the quantity being weighed. The scale will then divide the total weight by the number of samples and display the average unit weight.

- a. Zero the scale by pressing the **ZERO** key if necessary. If a container is to be used, place the container on the scale and tare as discussed earlier.
- b. Place a known quantity of items on the scale. After the weight display is stable, enter the quantity of items using the numeric keys followed by **SMPL** key. The number of units will be displayed on the "Quantity" display and the computed average weight will be shown on the "Unit Weight" display.
- c. As more items are added to the scale, the weight and the quantity will increase.

If the scale is not stable, the calculation will not be completed. If the weight is below zero, the quantity display will show negative count.

7.2 Entering a Known Unit Weight

If the unit weight is already known then it is possible to enter that value using the keypad.

- a. Enter the value of the unit weight using the numeric keys followed by pressing the **UNIT WT** key. The "Unit Weight " display will show the value as it was entered.
- b. Add the sample to the scale and the weight will be displayed as well as the quantity based upon the unit weight.

Please note the Known Unit Weight is in Gram ONLY in both g and lb mode.

7.3 Parts Counting

After the unit weight has been determined or entered it is possible to use the scale for parts counting. The scale can be tared to account for package weight as discussed earlier.

After the scale is tared add the items to be counted and the "Quantity" display will show the number of items computed using the weight and the unit weight.

It is possible to increase the accuracy of the unit weight at any time during the counting process by entering the count displayed then pressing the **SMPL** key. Ensure the quantity displayed matches the quantity on the scale before pressing the key. The unit weight will be adjusted based upon a larger sample quantity. This will give greater accuracy when counting larger sample sizes.

7.4 Manually Accumulated Total

The values (weight and count) shown on the display can be added to the values in the accumulator by pressing the **M+** key. The "Weight " display will show "add", the "Count" display will show the total accumulated count and the "Unit Weight" display shows the number of times items have been added to the accumulation memory. Press **M+** key again to return to normal mode.

More products can then be added and the **M+** key pressed again. Up to 99 entries can be made, or until the capacity weight display is exceeded.

To clear the memory press the **M+** key to recall the totals from memory. Press the **CE** key to clear all values from memory.

7.6 Data Presets

The scale can store 10 sample data so you don't have to sample your item every time before counting.

Initial setup: First sample your item as per 7.1. Then press **U.W. STORE** key. The "Weight" display will show "PUSH". Select the desired number then press the number key accordingly.

To count the items with preset data, just press **U.W. RETRIEVE** key. The "Weight" display will show "POP". Press the number key of the certain item then the sample data will show in the "Unit Weight" display. The scale is ready to count.

SECTION 8 BATTERY OPERATION

The scales can be operated from the battery if desired. The battery life is approximately 100 hours.

When the battery needs charging the arrow above the low battery symbol under the weight display will turn on. The battery should be charged as soon as the arrow above the symbol is on. The scale will still operate for about 10 hours after which it will automatically switch off to protect the battery.

To charge the battery simply plug into the main power. The scale does not need to be turned on.

The battery should be charged for 12 hours for full capacity.

On the left of Weight display there is an LED to indicate the status of battery charging. When the scale is plugged into the mains power the internal battery will be charged.

If the LED is Green the battery has a full charge.
If the LED is Yellow the battery is being charged.

As the battery is used it may fail to hold a full charge. If the battery life becomes unacceptable then contact your distributor.

SECTION 9 CALIBRATION

Calibration weights

QHC SERIES				
Model #	PS-C30KN-3KG	PS-C30KN-6KG	PS-C30KN-15KG	PS-C30KN-30KG
Weight Size	1kg	2kg	5kg	10kg

- Turn on the scale and the scale is stable at zero.
- Place the calibration weight on the center of the scale pan.
- Press and hold the **CAL** key for 3 seconds.
- Wait for the confirmation. The calibration is completed.