

KCS Counting Scale Instruction

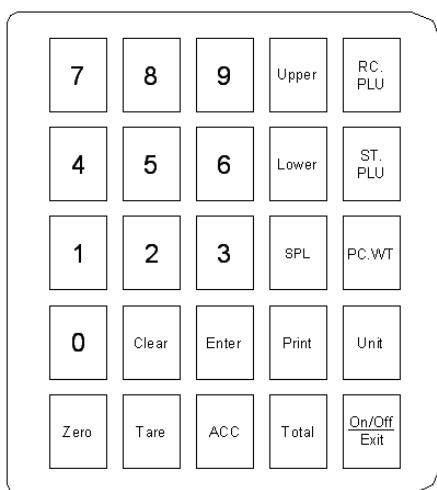
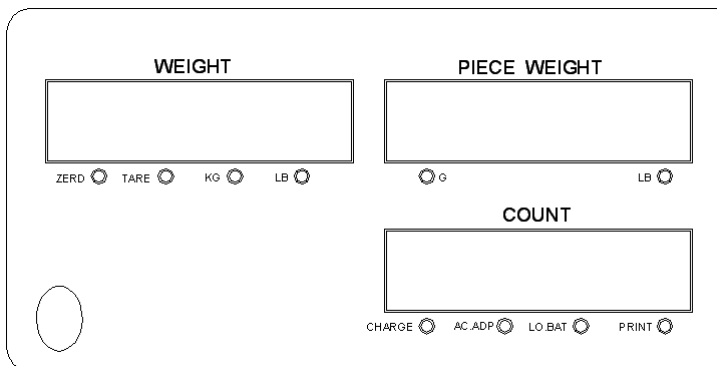
Manual

Thank you for purchasing Model KCS Counting Scale. Please read all operating instructions carefully before using and note the following points:

- Avoid lengthy exposure to extreme heat or cold as your scale works best when operated at normal room temperature. Always allow the scale to acclimate to a normal room temperature before use.
- Allow sufficient warm up time. Turn the scale on and wait a few minutes to allow the internal components and load cell to stabilize before calibrating or weighing.
- Do not read the scale long time after the reading is stable, as there might be minor changes on output signal of the load cell and electronics after long time.
- Do not operate near an in-use cell phone, radio, computer or other electronic device as these devices emit RF and maybe cause unstable scale readings.

1 Specification

Model No.	KCS 1000-6-256M	KCS 1000-15-256M	KCS 1000-30-256M
Capacity	6kg / 12 lb.	15kg / 30lb	30kg / 60lb
Division	0.5g / 0.001 lb.	1g / 0.002 lb.	2g / 0.005 lb.
Min. unit weight	0.05g / 0.0001 lb.	0.1g / 0.0002 lb.	0.2g / 0.0005 lb.
Min. reference sample weight	30g / 0.06 lb.	75g / 0.15 lb.	150g / 0.30 lb.
Tare range	0-100%		
Zero range	Power-on zero range: calibration zero point \pm 10%FS; ZERO key range: power-on zero \pm 5%FS		
LED display	18 digits: 6 digit for weight reading, 6 digit for piece weight reading, 6 digit for pieces		
Max. display weight	15.009kg/30.018lb	30.009kg/60.018lb	
Piece weight range	0.0g – 99999.9g		
display quantity range	0-16777216, when it is over 999999, the scale will display“H xxxx”and“L xxxx”alternatively.		
Working temp.	-10℃ ~ 40℃		
Power supply	AC adaptor 12Vdc,500mA with positive centre or 6Vdc4AH rechargeable lead-acid battery		
Battery life	More than 12 hours after fully recharged		
Platter size	L×D: 288×210 11 ¼” x 8 ¼”		
Housing dimension	L×D×H: 300×350×115 11 ¾” x 13 ¾” x 4 ½”		



2.Keys function

2.1 **0~9** numeric keys: Used to enter numerical data

2.2 **CLEAR:** Used to clear the input data and accumulated pieces.

2.3 **ENTER:** Used to confirm the operation or save the data

2.4 **ZERO:** Used to set the zero point when scale is stable,
zero range: power-on zero point $\pm 5\%$ FS

2.5 **TARE:** Used to tare the weight when scale is stable, tare range: 0~100%FS

2.6 **ADD:** Used to accumulate the current quantity when the scale is stable.

2.7 **TOTAL:** Display the accumulated quantity and accumulation times

- 2.8 **UNIT**: Select weight unit between Kg or Lb and g or lb
- 2.9 **PCWT**: Go to input piece weight mode
- 2.10 **ST.PCWT**: Go to set piece weight,tare weight and its unit mode.
- 2.11 **RC.PCWT**: Go to recall stored piece weight,tare weight and its unit mode.
- 2.12 **SAMPLE**: Go to input sample quantity and calculate piece weight mode.
- 2.13 **HI**: Go to set upper limit quantity mode.
- 2.14 **LO**: Go to set lower limit quantity mode.
- 2.15 **PRINT**: Output the data via RS232 port
- 2.16 **ON/OFF/EXIT**: When the display is off, press On/Off key to turn on the scale. When the display is on, press On/Off key more than 4s to turn off the scale. When in inner code display mode, calibration mode or other setup mode, the On/Off is used to exit current mode.
- 2.17 **ON/OFF+0**: Press down more than 4s to used to enter the calibration mode. SEE WARNING BELOW
- 2.18 **ON/OFF+1**: Press down more than 4s used to enter the LED's brightness setup mode
- 2.19 **ON/OFF+2**: Press down more than 4s used to enter the auto-off time setup mode
- 2.20 **ON/OFF+3**: Press down more than 4s used to enter display A/D inner code or working voltage mode. SEE WARNING BELOW
- 2.21 **ON/OFF+4**: Press down more than 4s used to enter RS232 parameters setup mode
- 2.22 **ON/OFF+5**: Press down more than 4s used to enter the date and time setup mode
- 2.23 **ON/OFF+6**: Press down more than 4s used to enter ID setup mode

3 Messages & symbols

1. Err01: Weight signal is too large
2. Err02: No proper data can be displayed
3. Err03: Weight signal is too small
4. Err04: Zero point is over the setting range
5. Err05: Zero point is below the setting range
6. Err10: the EEPROM can't be accessed
7. Err11: The parameters in EEPROM are not same with backup data

8. Err12: The setting parameters in EEPROM is not in normal range
9. Err20: There is an error in calibration
10. Err30: ADC is over max. range
11. Err31: ADC is below min. range
12. Err40: Recall error(data not been set before recall it)
13. CAP. : Data about capacity
14. UoL. : Data about voltage
15. Add : Data about accumulation
16. PC.t : Data about piece weight
17. St.PC.t : Set and store piece weight
18. Addr. : unit Address.
19. Unit: Weighing unit
20. Rc.PC.t : Recall the stored piece weight, tare and it's unit
21. Lo.PC.t: Below the Mini Piece Weight limit
22. SPL.PCS: Data about sample pieces
23. Hi.PCS: Data about upper limit pieces
24. Lo.PCS: Data about lower limit pieces
25. Lo.SP.t: Below Mini sample weight limit
26. UnLoAd: Unload the loaded weight
27. LoAd: Load the weights
28. InP.Ld: Input the load weight
29. CAL.oN: Calibration enable switch is ON
30. CAL.oFF: Calibration enable switch is OFF

KCS 1000 procedures

#1 To count when the average piece weight is known but not stored into memory

No container being used

1 Press

2 Enter average piece weight

3 Put pieces to be counted on the platter

END Read the count on the display

#2 To count when the average piece weight is unknown and not stored into memory

No container being used

1 Put samples to be counted on platter

2 Press

3 Key in quantity of sample on platter

4 Remove sample from platter

END Start counting

#3 To count when the average piece weight is known but not stored into memory

Container is being used and weight of the container must be subtracted (TARE)

1 Put empty container on the platter

2 Press

3 Press

4 Enter average piece weight

5 Put pieces to be counted on the platter

END Read the count on the display

#4 To count when the average piece weight is unknown and not stored into memory

Container is being used and weight of the container must be subtracted (TARE)

1 Put samples to be counted on platter

2 Press

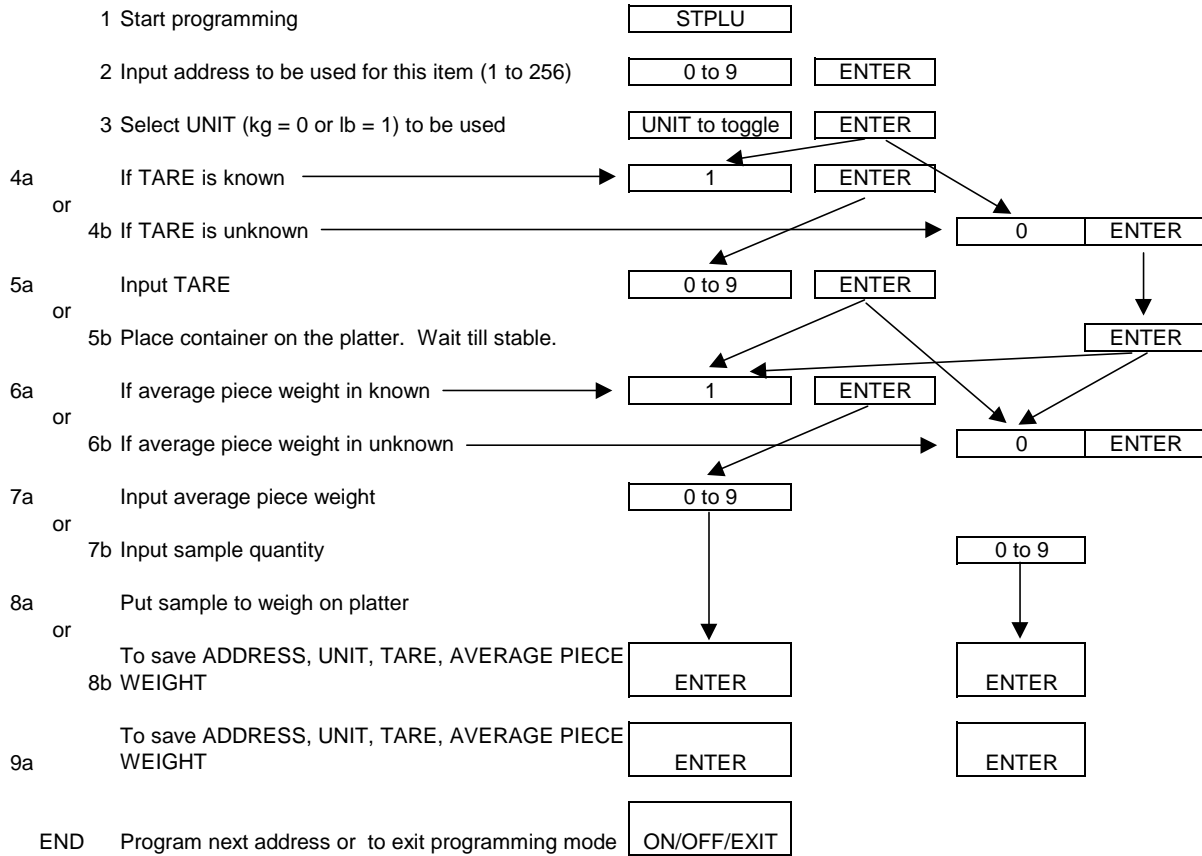
3 Key in quantity of sample on platter

4 Remove sample from platter

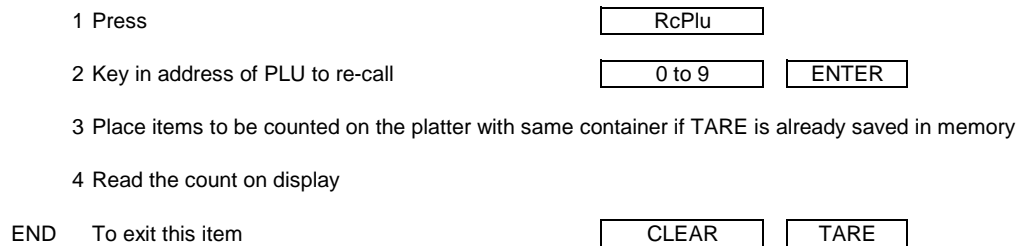
END Start counting

#5 To store information into memory

Whether TARE and Average Piece Weight are known or unknown

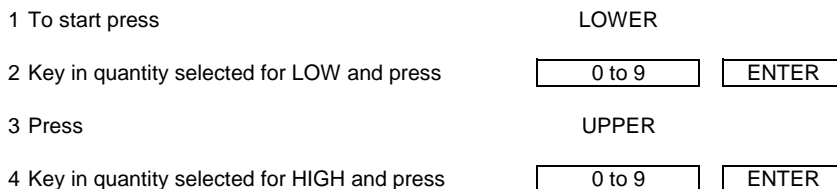


#6 To re-call information into memory



#7 To do HI/LO or TARGET counting

You can set a HIGH quantity and a LOW quantity and the scale will beep when the quantity on the platter is between your selected high and your selected low. Example: I want the scale to tell the operator when the quantity of pieces on the platter is between 99 and 101.



Use the CLEAR key to erase current values.

5 Do counts

NOTES: The selected HI/LO will remain as stored until another selection is made or the mode is exited.
Proper target values are $LO \leq HI$ and $LO > 0$. If in this range, scale will "beep" slowly.

#8 Accumulation / Accumulation clearing / Accumulation display

Use this function to accumulate and total counts of the same items (like M+, MR and MC on a calculator)

1 To add a count, after the count has displayed press

2 Repeat for every count that you want to add to total

3 To recall TOTAL press

4 To clear TOTAL press

#9 Calibration of the scale (see warning below)

Calibration of this scale should be done only by qualified technician using accurate test standards. The calibration instructions are available at the Kilotech service department at 800-694-4445 or 877-328-5988.

#10 LED brightness setting

1 When in normal weighing mode press together and hold +

2 WEIGHT window will show SetuP and PIECE
WEIGHT window will show Led.brt
COUNT window will show x-x

3 Input 1, 2 or 3

4 To confirm

END To exit

#11 AUTO-OFF setting

The auto-off function can be programmed to different times to turn off when not in use.

1 When in normal weighing mode press together and hold +

2 WEIGHT window will show SetuP and PIECE
WEIGHT window will show A.OFF.trt
COUNT window will show a number

3 Input the number of minutes in which you want the scale to automatically turn off when not in use you

4 To confirm

END To exit

#12 RS232 settings (see warning below)

If you are not familiar with communication setting, have this done by a specialist.

- 1 When in normal weighing mode press together and hold

ON/OFF/EXIT +

- 2 WEIGHT window will show SetuP and PIECE
WEIGHT window will show 232.bPs
COUNT window will show the baud number

- 3 Input the 1, 2, 3, 4 or 5 number to activate the desired baud. (1200, 2400, 4800, 9600 or 19200)

- 4 To confirm

END To exit

If you did not exit

WEIGHT window will show SetuP and PIECE

- 5 WEIGHT window will show 232.dFt

COUNT window will display data format

- 6 Input the 1, 2 or 3 number to select the data format.

1 = 8N0 8 bits data, no odd or even, 1 start and 1 stop bit

2 = 7O1 7 bit data, 1 even, 1 start, 12 stop bit

3 = 7E1 7 bit data, 1 odd, 1 start, 1 stop bit

- 7 To confirm

END To exit

If you did not exit

WEIGHT window will show SetuP and PIECE

- 8 WEIGHT window will show 232.cFt

COUNT window will display the communication format

- 9 Input the 1, 2 or 3 number to select the com format.

1 = When the scale is stable, the scale will output the data automatically one time; the format is as below.

2 = When the scale is stable, the scale will output the data after pressing PRINT key; the format is as below.

3 = When the scale becomes stable OR press PRINT key the scale will output the data once; the format is as below.

<LF>ID: xxxxxx<CR><EXT>

<LF>Date: YY/MM/DD<CR><EXT>

<LF>Time: hh:mm<CR><EXT>

<LF>Gross: xxx.xxx kg or lb<CR><EXT>

<LF>Tare: xxx.xxx kg or lb<CR><EXT>

<LF>Net: xxx.xxx kg or lb<CR><EXT>

<LF>Unit: YY/MM/DD<CR><EXT>

<LF>Date: YY/MM/DD<CR><EXT>

Note: The the ID, date and time can only be printed out after setting. See below.

RS-232

Scale (indicator)	Cable 9 pin	Host
DB9 (female)	DB9 (male)	DB9 (female) DB9(male)
PIN2 TXD	2	2 PIN2 RXD
PIN3 RXD	3	3 PIN3 TXD
PIN5 GND	5	5 PIN2 GND
PIN4 DSR	4	4 PIN4 DTR
PIN6 DTR	6	6 PIN6 DSR
PIN7 CTS	7	7 PIN7 RTS
PIN8 RTS	8	8 PIN8 CTS
PIN1 NC	1	1 PIN1 NC
PIN9 NC	9	9 PIN9

Note: PIN4, 6, 7 and 8 are shorted in scale.

10 To confirm

11 To exit

#14 ID setting

1 When in normal weighing mode press together and hold +

2 WEIGHT window will show SetuP and PIECE
WEIGHT window will show "id"
COUNT window will show an ID number (default is 000000)

3 Input the desired ID code

4 To confirm

END To exit

#14 Date & time setting

1 When in normal weighing mode press together and hold +

2 WEIGHT window will show SetuP and PIECE
WEIGHT window will show "date"
COUNT window will show the current date (default is 06.10.15)

3 Input the desired date (YY.MM.DD)

4 To confirm

WEIGHT window will show SetuP and PIECE
5 WEIGHT window will show "time"
COUNT window will show the current time

6 Input the desired time (hh.mm.ss)

7 To confirm

END To exit