K I L O T E C H

KIN 500

KWS 2200-15 / 30 / 60

KWS CY-60 / 150 / 300

KWS VET 250

www.kilotech.com

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Introduction

Thank you for choosing a Kilotech Scale. We appreciate your business and hope that you will enjoy using your scale. Should you require Technical Support, please contact your local dealer from whom you have purchased.

General Precautions

Avoid lengthy exposure to heat or cold	Allow the scale to acclimate to normal room temperature before use
Allow sufficient warm up time	Turn the scale on and wait for a few minutes to allow the internal components a chance to stabilize before weighing
Do not leave a load or weight on a scale for a prolonged period of time	Might damage load cell
Do not tamper with the scale yourself	This will void the warranty. Contact your local distributor or Kilotech directly to properly repair your scale
Do not overload beyond the maximum weight limit	
Do not pull the plug by its cord when unplugging	
Do not use the scale near fire or corrosive gas	
Unless the scale is waterproof do not spill water or immerse in water	
Avoid placing the scale near a heater	It could cause a fluctuation to the indicator reading
Always make sure to use a Kilotech approved adapter	
Do not drop the scale or subject to sudden shock	
Do not drag the scale	
Avoid exposing to other electromagnetic devices	These devices emit RF and can cause unstable readings. If your scale should perform poorly, try moving the scale to a different room or location
Ensure that the scale is level	A scale used on an uneven surface may provide an unstable reading
Scale should be used within stated temperature & humidity limits	

Specifications

	Non Legal	Non Legal	Legal	Non Legal	Legal	Non Legal	Legal
Item Number	851709	851330	881330	851332	881332	851334	881334
Product Name	KIN 500	KWS 2200-15		KWS 2200-30		KWS 2200-60	
Capacity	Programmable	15 kg / 30 lb		30 kg / 70 lb		60 kg / 150 lb	
Graduation	Programmable	0.00 5 kg / 0.01 lb		0.01 kg / 0.02 lb		0.02 kg / 0.05 lb	
Weighing Modes	Kg, lb, lb:oz, %, pcs	kg, lb		kg, lb		kg, lb	
LCD Indicator	1" high, 6 ½ digits						
Backlight	Programmable						
Auto Power Off	Programmable						
Power	4 x 1.5 V DC "AA", 120 V AC to 6 V DC adapter, Low battery signal. Adapter included, batteries not included.						
Dimensions	89 x 305 x 45 mm 3.5" x 12" x 1.75"	35.25 x 41.28 x 19.69 cm 13 7/8" x 16 1/4" x 3 1/4"		35.25 x 41.28 x 19.69 cm 13 7/8" x 16 1/4" x 3 1/4"		35.25 x 41.28 x 19.69 cm 13 7/8" x 16 1/4" x 3 1/4"	
Operating Temperature / Humidity	-10° C ~ 40° C / 14° F ~ 104° F / <90% RH non-condensing						
RS232	Yes						
Checkweighing	HI/LO/OK annunciate & alert buzzer						
Approved Measurement Canada & NTEP	AM 5898 CC 13-016 Max 5000 count						

Specifications

	Non Legal	Non Legal	Non Legal	Non Legal
Item Number	851313	851314	851315	851317
Product Name	KWS CY-60	KWS CY-150	KWS CY-300	KWS VET 250
Capacity	60 kg / 132 lb	150 kg / 330 lb	300 kg / 660 lb	250 kg / 500 lb
Graduation	0.02 kg / 0.05 lb	0.05 kg / 330 lb	0.1 kg /	0.2 lb
Weighing Modes	kg, lb	kg, lb	kg, lb	kg, lb
LCD Indicator	1" high, 6 ½ digits			
Backlight	Programmable			
Auto Power Off	Programmable			
Power	4 x 1.5 V DC "AA", 120 V AC to 6 V DC adapter, Low battery signal. Adapter included, batteries not included.			
Dimensions	45 x 45 cm 18" x 18"	61 x 61 cm 24" x 24"	76 x 76 cm 30" x 30"	61 x 107 cm 24" x 42"
Operating Temperature / Humidity	-10° C ~ 40° C / 14° F ~ 104° F / <90% RH non-condensing			
Input	X	X	X	X
RS232	X	X	X	X
Checkweighing	HI/LO/OK annunciate & alert buzzer			X
Approved Measurement Canada & NTEP	X	X	X	X

Unpacking

- Remove the scale from the box and place it on a firm, level surface.
- Avoid locations with rapid temperature changes, excessive dust, moisture, air currents, vibrations, electromagnetic fields, heat or direct sunlight.
- Adjust the leveling feet until the bubble is centered in the circle of the level indicator (located on the front panel).

- NOTE: Ensure that the scale is level each time its location is changed.
- If the scale will be stored or transported in the future, save the packaging material to ensure the best possible protection for the scale.
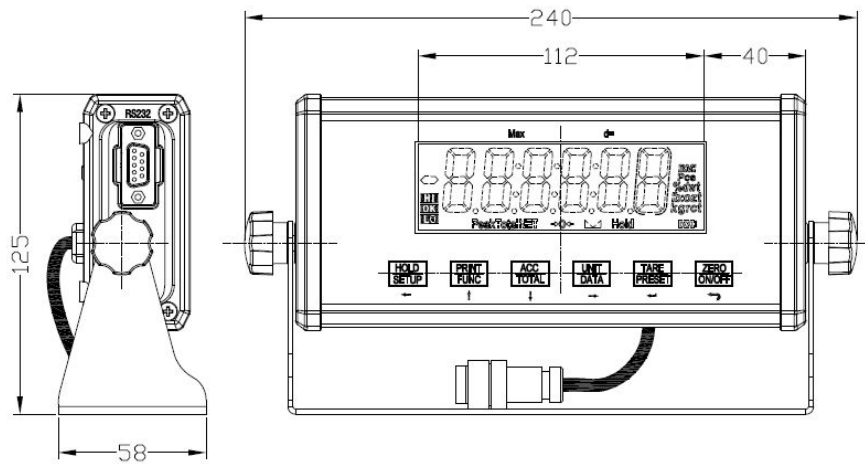- There is no leveling bubble on KIN 500

Contents

- Scale or indicator
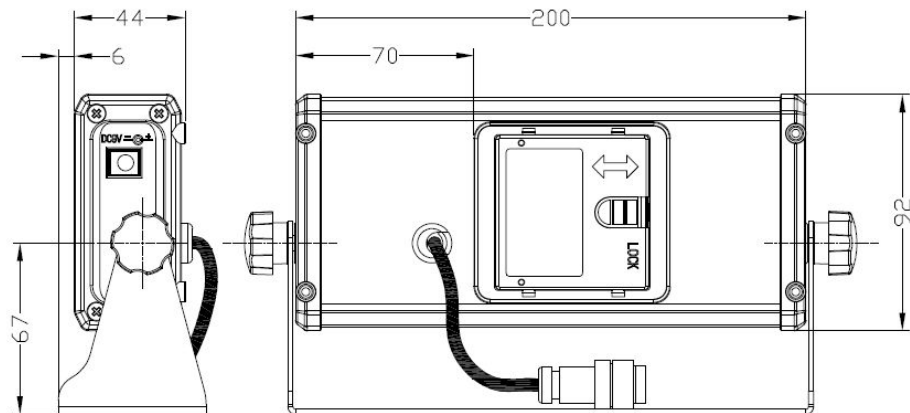- 120 V AC to 6 V DC adapter
- Manual

Dimensions
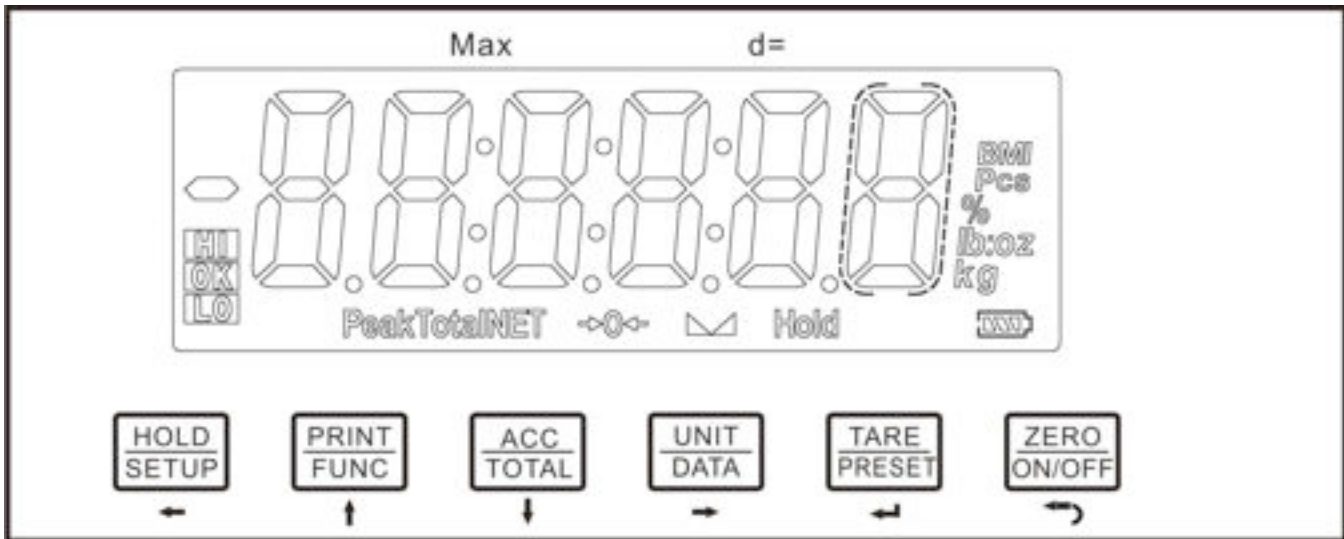
Front View

Left View

Right View

Back View

Power

If 4 x AA size alkaline batteries are used and all the LCD display segments are flashing and "Lo.bAt" is displayed, this will prompt you to replace the batteries immediately, otherwise, it will turn off automatically in 10 seconds.

AC Adapter: 6VDC 500mA, with central negative:

Symbol	Definition
(stable icon)	Turn on when scale is stable
(zero icon)	Turn on when scale is at zero point and the gross weight is 0
NET	Turn on when net weight is displaying, and the tare weight is not 0; turn off when gross weight is displaying
TOTAL*	Turn on when display data is total times or total of weight, pieces or percentage
lb	Turn on when measure unit is lb or lb:oz
oz	Turn on when measure unit is oz or lb:oz
kg	Turn on when measure unit is kg
%*	Turn on when in percentage weighing mode, measure unit is %
Pcs*	Turn on when in counting mode, measure unit is pieces
BMI	Turn on when working in BMI mode
PEAK	Turn on when in working in HOLD mode and HOLD type is PEAK-HOLD
HOLD	Turn on and flashing/not flashing: working HOLD mode and displaying number is/isn't live
HI*	Turns on when data compare is enable and current data (weight, pieces or percent) is over its upper setting limitation
OK	Turns on when data compare is enable and current data (weight, pieces or percent) is between its high limitation and low limitation
LO*	Turn on when data compare is enable and current data (weight, pieces or percent) is below
(battery icon)	Turn on when battery is used or charged

*This function is not used on the Vet Scales

Key Descriptions

Please note that this is a general description of the functions. Some of the keys described below might not be available on your scale. The key examples in this manual are included solely for illustrative purposes. Color or shape of icon might be different.

ZERO / ON/OFF
This key is used to power the scale on and off.
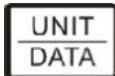**Return to Zero**
The zero key can be used to correct a deviation from zero. Press the Zero key to return to a zero value.
The most common cause of a zero deviation is debris on the platter, leaving objects on the platter for excessive periods of time, or near empty battery.
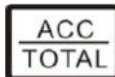
TARE / PRESET
The TARE key is used to deduct the weight of the empty container. It is deducted from gross weight before completing a transaction. Place the container on the scale and when the reading is stable, press TARE. The screen will read 0. TARE will appear on the screen. Now add the products to the container to get their true weight. To remove the TARE function, remove the item with its container and press TARE again. Now the TARE function is cancelled. The range of TARE is up to its maximum capacity.

UNIT/DATA
The Units key is used to toggle between the available units on the scale.

*not applicable for the veterinarian scale
ACC/TOTAL
Is used to accumulate and calculate the total weight.

*not applicable for the veterinarian scale
PRINT/FUNC
It is used to transmit the data over the communication port.

HOLD /SETUP
Peak hold is used to keep the highest value on display when weighing a dynamic load (example: livestock).

Summary of Keys / Functions

Note:

Normally, to use the secondary function of a key, it must be depressed for more than 3 seconds.

Key	Status	Function
HOLD / SETUP ←	Weighing/Counting/Percent, press down < 3s	Enter or exit HOLD mode
	Weighing/Counting/Percent, press down > 3s	To enter setup mode
	Input data mode, press down > 3s	To input decimal point
	Input data mode, press down < 3s	Return to last sub-menu
	Menu selection mode	Return to last sub-menu
PRINT / FUNC ↑ *not used for Vet scale	Weighing/Counting/Percent, press down < 3s	Output data to serial communication port
	Weighing/Counting/Percent , press down > 3s	Select working mode: weighing ,counting or percent
	Input data mode	The digit on flashed position add 1
	Menu selection mode	To last item of current menu
ACC / TOTAL ↓ *not used for Vet scale	Weighing/Counting/Percent, press down < 3s	To add up current weight/pieces/percentage to memory, display times and total of accumulation
	Weighing/Counting/Percent, press down > 3s	To display times and total of accumulation
	Input data mode	The digit on flashed position subtract 1
	Menu selection mode	To next item of current menu
UNIT / DATA →	Weighing mode, press down < 3s	Change weighing units
	Counting mode, press down < 3s	To enter getting piece weight
	Percent mode, press down > 3s	Set the percentage weight (keypad or platter)
	Weighing/Counting/Percent , press down < 3s	Set the HI/LO
	Display date or time mode, press down > 3s	To set current date or time
	Input data mode	Rotate the flashed position from left to right
TARE / PRESET ←	Weighing/Counting/Percent , press down < 3s	Tare function
	Weighing/Counting/Percent , press down > 3s	To input pre-set tare weight at selected weight unit
	Input data mode or Menu selection mode	To confirm input data or current item selection
	Display ADC code	To confirm current menu
ZERO / ON/OFF ↳	Power off mode	Power on
	Weighing/Counting/Percent, press down < 3s	Zero function
	Weighing/Counting/Percent, press down > 3s	Power off
	Input data mode	Ignore modification
	Menu selection mode	Prepare to exit from current working mode

Normal Weighing Mode

Note : During keypad operation, to get to the second function of a key, press it down for more than 3 seconds. To input data or select menu, use the navigation keys to enter.

Power on scale:
When the scale is off, short press the ON/OFF key to turn the scale on.

Power off scale:
When the scale is on, long press the ON/OFF key to turn the scale off.

Change working mode:
Long press the FUNC key, then use arrows to choose and confirm to enter into weighing mode.

Enter to or exit from the HOLD mode:
Press the HOLD key.

ZERO:
When the weight is stable and within the zero range, press the ZERO key to set the new zero point.

TARE: When the gross weight is big than zero, and the scale is stable, press the TARE key. The indicator will show a net weight of zero and the NET announciator will be lighted.

Preset tare weight: Long press the PRESET key, Pr. Tare will show, and the TARE announciator flashes, it means it is in preset TARE weight mode, use arrows to input the tare weight, and its unit is the same as the unit that it used before, there's no limitation to preset tare weight, but it should be larger than zero. After input of a tare weight, "NET" announciator will be lighted.

Clear tare weight: Remove any weight from the platform. Wait until the scale is stable. Short press the TARE key.

Change Weight UNIT: Short press UNIT key to select kg, lb or lb:oz unit. Note that under some conditions, lb:oz is not available.

Error Codes

0--- --- --- ---	Zero is over the setting range
0___ ___ ___ ___	Zero point is below the setting range
Ad--- --- ---	Signal to ADC is over max. range
Ad ___ ___ ___	Signal to ADC is below min. range
--- --- --- ---	Weight is over upper limitation, or display data is over limitation
--- --- --- ---	Weight is below lower limitation
EEP.E1	CONFIG or CAL parameters are not correctly set
EEP.E2	USER parameter is not correctly set
Lo.bAt	Battery voltage is lower than setting

Programming Symbols

CAP.- - -	Next displaying content is Capacity
CAP.ER	Capacity parameters are not correct
CAL.Px	Calibration on point(x)
CAL.OFF	Calibration Seal Switch is on OFF position
CAL.ON	Calibration Seal Switch is on ON position
CAL.Er	Calibration error, maybe input data or loaded weight is incorrect, unstable, un-linear
CAL.End	Calibration is ended
OFF	Power OFF the indicator
STB.ER	Unstable scale
AC.xxxx	Number of accumulations
PR.TARE	To Preset TARE weight
COMP	Enter into COMPARE data mode
HIGH	Input HIGH value
LOW	Input LOW value
INP.PCS	Input # of weighted goods
UNIT.KG	Unit kg is selected
UNIT.LB	Unit lb is selected