The use method of computer RS232 socket: refer to photo Disk.

ASC II code receive parameter (the RS232 transfer parameter)

Baud   rate   9600

Parity   bit   none

Data   bit   8

Stop   bit   1

VW-320 PORTABLE SCALE

INSTRUCTION MANUAL

www.balances.com is your VMC deep discount distributor

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SAFETY PRECAUTIONS

All safety messages are identified by the words "**WARNING**" and "CAUTION". These words mean the following:

⚠ **WARNING**	**Important information to alert you to a situation that might cause serious injury and damage to your property if instructions are not followed.**
⚠ CAUTION	Important information that tells how to prevent damage to the equipment.

When using the scale, the following safety precautions should always be followed.

⚠ **WARNING**

Use only the correct AC adaptor with the scale. Other adaptors may cause permanent electrical damage.

⚠ **CAUTION**

Avoid placing the scale in direct sunlight, this may cause discoloration or malfunction.

Replace all batteries at the same time – Do not replace only a portion of the 6 batteries as this may cause a malfunction.

If the scale is not to be used for a long period of time, remove all batteries from the battery compartment to avoid leakage, which may cause damage to this scale.

Avoid overloading the scale, as this may cause permanent damage and void your warranty – do not EVER exceed the maximum capacity of the scale

Keep the scale away from water – this scale is not water resistant.   Shock, injury and electrical damage can occur if used in a wet location!

Matter charged with static electricity could affect accuracy. Discharge all static electricity. For example, one method is to use Static-Guard spray, and spray it on both sides of the weighing platform.

SPECIFICATIONS

Model number	Capacity	Graduation
VW-320-60	60kg	0.02kg
VW-320-150	150kg	0.05kg
Platter / Tray	325 x 315 x 55mm	
Net/gross weight	4.1kg/4.5kg	
Package	Standard carton: 44.5×34.6×7(cm^3)	
	5 Units in one box: 46×36×39(cm^3)	
Operating Temperature	Optimum: 15-30℃ (62-90f)	
Power source	6×AA Batteries or AC/DC	
	Adapter 9V/100mA	

SPECIAL WARNING
Cell-Phones, Cordless-Phones, and any radio-frequency device can cause temporary interference and cause the scale to temporarily not work properly.   Please do not use any electronic device near the shipping scale.   Just like in an Airplane, do not use your cell-phone near the scale when it is in use.   While there is NO risk of permanent damage to the scale, interference can cause an incorrect calibration or incorrect weight readings.

CALIBRATION

When to calibrate - calibration is almost never required.

If the scale is inaccurate, calibration may be desired when the scale is first set up for use, or if the scale is moved to a different altitude or gravitation.   This is necessary because the weight of a mass in one location is not necessarily the same in another location. Also, with time and use, mechanical deviations can occur.

How to calibrate

you must have an accurate the full load kilogram weight or combination of weights in order to calibrate

1. Select the calibration unit

press the [**ON/OFF**] to turn the power off. Press and hold [**UNIT**] first, then press the [**ON/OFF**],the display will show "c=xxx ►" the ► sign indicate the calibration unit .Press the [**HOLD**], the ► sign indicate the different calibration unit(eg kg or lb).Now the calibration unit is selected.

2 . **Enter calibration mode**

 The scale must be powered OFF.   Press and hold **[ZERO]** first, then Press **[ON/OFF]** while keeping the **[ZERO]** button depressed, then release both keys. The display will show the A/D value (a series of random numbers).

3.Wait for the stable A/D value to be displayed, Press **[UNIT]** the display will show

"SAVE0", then the display will return to the random A/D value.

4.Place the weight(s)(60kg or 120 lb for VW-320-60;150kg or 300 lb for VW-320-150) on platform.   Wait for the stable indicator to display, then press **[UNIT]**, the display will show **"SAVE1"**.   Calibration is complete, remove the weight(s).

5.Turn the scale OFF (Press the ON/OFF key) , then turn it back ON and check some weight readings.   If calibration is still incorrect, repeat calibration but try it more slowly.

If calibration is repeatedly incorrect then: 1) Replace the batteries,   2) Try a more stable surface or vibration and interference free location,   3) Be sure there is no static electricity on the scale (use an anti-static spray to remove static electricity)

FEATURES

- Auto shut off (selectable)
- Auto zero tracking
- Removable display w/3ft cord
- Large LCD
- Large square weighing tray.

- Auto calibration
- Battery or AC Power
- kg /lb   conversion
- hold function

PARTS DESCRIPTION

► **SIDE**

AC adaptor

Socket

ON/OFF key
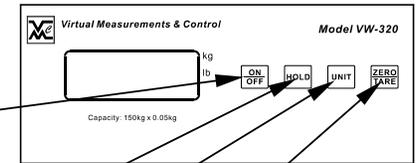
Turns the scale

 power on/off.

HOLD KEY

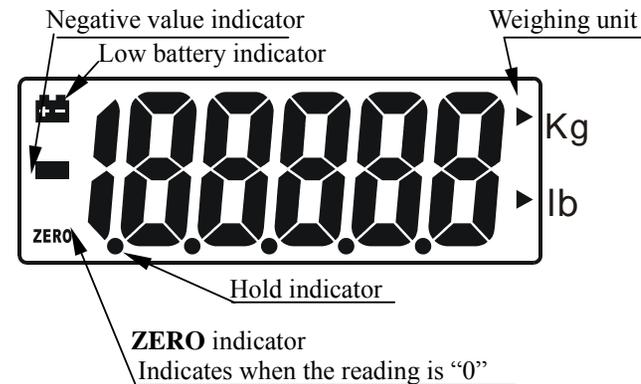Remain on the display for 120 seconds.

UNIT key

Changes weighing units, eg. kg or lb,.

ZERO key (for TARE)

Sets display to zero or

Subtracts weight of a container.

► **DISPLAY**

Negative value indicator

Low battery indicator

Weighing unit

Kg

lb

ZERO

Hold indicator

ZERO indicator

Indicates when the reading is "0"

HOLD(send data) FUNCTION

Once the <u>hold</u> **key is pressed: 1). The CPU will send weight data into RS232 socket. 2)the weight will remain on the display for 120 seconds after the item has been removed from the scale so the weight can easily be read.**

1) Place the item on the scale platform.
2) Wait for the stable weights to be displayed.
3) Press the **hold** key. The "**.**" hold indicator will turn-on.
4) Remove the item from the scale platform. The item's weight reading will remain on the display for 120 seconds.
5) Quit to hold function: Once an item is weighed and the **hold** function is enabled; you want to quit to hold function, Press the **hold** key again to cancel the "**.**" hold indicator and return the scale to weight value.

FUNCTION SETTINGS

1. Enter function setting mode.

   Press **[ON/OFF]** to turn the power off, Press **[HOLD]** first, then press **[ON/OFF]**, while keeping **[HOLD]** pressed, the display will show **A_ON** or **A_OFF**.

2. Selection of auto shut off mode.

   When the balance enter function setting menu. Press **[ZERO]** key, the display will show **A_ON** or **A_OFF**, selection display **A_ON**, this means auto shut off function active. Press **[ZERO]** again, the display will show **A_OFF**, this means auto shut off function inactive.

WEIGHING

Before weighing

Whenever possible, please allow the scale to warm up for several seconds after first turning the power on so that the scale will function properly and accurately.

Error messages
EEEE: Overload
⊞   Low battery

Weighing procedures

1.Press [ON/OFF] to turn on the scale.

When the power is turned on, the display show "F=XXX"for a few seconds and "0" will appear on the display.

2.Select the weighing unit with [UNIT].

Press **[UNIT]** to select a weighing unit "kg", "lb".
Once the unit has been selected, the selected unit will be displayed next to the weight value.

3.Start weighing

If you do not use a container for weighing,

Verify the reading is "0". If not, press **[ZERO/TARE]** to display "0".
Place the items to be weighed on the platform.
When the reading becomes stable, the stable weighing is displayed.

If you use a container for weighing,

Place an empty container on the platform.
Wait for the stability indicator to be displayed and press **[ZERO/TARE]**.

Place the objects to be weighed in the container.

When the reading becomes stable, the stable weighing is displayed.