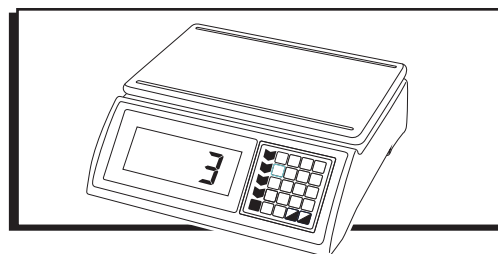


ULINE

H-5819, H-5820
H-5821, H-5822

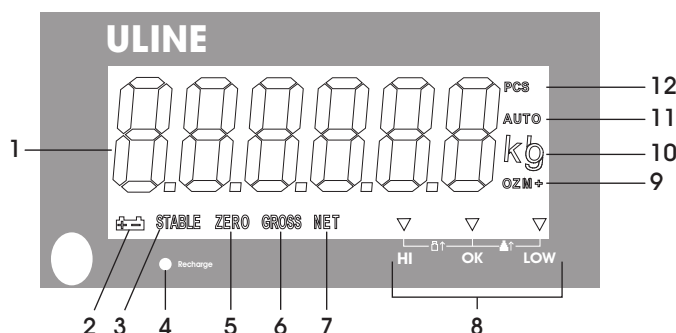
DELUXE COUNTING SCALE

1-800-295-5510
uline.com

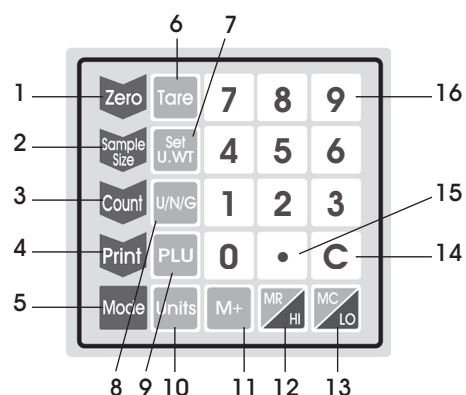


OVERVIEW OF CONTROLS

DISPLAY



KEYPAD



DISPLAY DEFINITIONS

#	NAME	DESCRIPTION
1	DISPLAY	Displays the total weight, unit weight and number of counted items.
2		Battery indicator. Indicates battery is low and needs to be recharged.
3	STABLE	Stable indicator. Indicates the scale weight is stable.
4	RECHARGE	Charging indicator. Indicates the battery charging status.
5	ZERO	Zero indicator. Indicates the scale is at zero.
6	GROSS	Gross indicator. Indicates scale is displaying the gross weight.
7	NET	Net indicator. Indicates scale is displaying the net weight.
8	HI / OK / LOW	Limits indicator. Indicates the High-Low limits in weighing and counting.
9	M+	Accumulation indicator. Indicates the scale is in the accumulation mode.
10	LB / OZ / G / KG	Weighing Unit indicator. Indicates current weighing unit.
11	AUTO	Automatic Accumulation indicator. Indicates the scale is in automatic accumulation mode.
12	PCS	Counting indicator. Indicates the scale is in the counting mode.

KEYPAD DEFINITIONS

#	NAME	DESCRIPTION
1	ZERO	Zero key. Used to clear and zero the display.
2	SAMPLE SIZE	Sample Size key. Used when keying in the sample amount.
3	COUNT	Count key. Used to enter the counting operation.
4	PRINT	Print key. Used to send data to a printer or PC.
5	MODE	Mode key. Used to select the application mode – Weighing, Counting, Check Weighing, Check Counting or Accumulation.
6	TARE	Tare key. Used to zero out the weight of a container being used to hold small parts.
7	SET U. WT	Set Unit Weight key. Used to manually key in the unit weight.
8	U / N / G	Unit / Net / Gross Weight key. Used to show the unit, net or gross weight.
9	PLU	Unit Weight Memory key. Used to store weights into scale memory.
10	UNITS	Units key. Used to change weighing unit.
11	M+	Memory key. Used to add current weight or count to memory.
12	MR / HI	Memory Recall key. Used to show total accumulated weights or counts in memory. HI key. Used to set high limit.
13	MC / LO	Memory Clear key. Used to clear accumulated weights or counts from memory. LO key. Used to set low limit.
14	C	Clear key. Used to clear incorrect numeric values.
15	.	Decimal key. Used to enter decimal place when values are entered manually.
16	0-9	Numeric keys. Used to enter values manually.

SETUP



WARNING! Disconnect all power to the scale before installing, cleaning or servicing. Failure to do so could result in bodily harm or damage to the scale.

SELECTING THE LOCATION

The scale should always be used in an environment that is free from excessive air currents, corrosives, vibration and temperature or humidity extremes. These factors will affect displayed weight readings.

Avoid placing the scale next to or near:

- Open windows or doors.
- Air conditioning or heat vents.
- Vibrating, rotating or reciprocating equipment.
- Magnetic fields.
- Equipment that generates magnetic fields.
- Direct sunlight.
- An unstable work surface.
- A dusty environment.
- Large users of electricity like welding equipment or large motors.

INSTALLING THE PLATFORM

1. Place the scale on a flat surface.
2. Remove protective covering from the scale platform.
3. Place the platform on top of the scale.

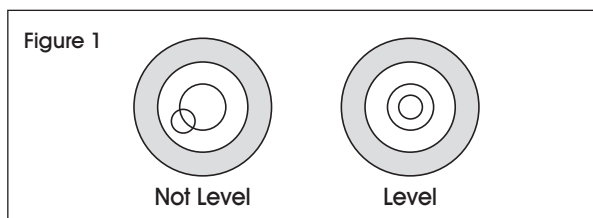


CAUTION! Do not press down with excessive force. This could damage the load cell.

LEVELING

The scale is equipped with a level indicator located to the left of the display.

Use the adjustable leveling feet located on the bottom of the scale until the bubble appears in the center of the indicator. (See Figure 1)



Check leveling indicator every time scale is moved to a new location to verify scale is balanced.

CONNECTING POWER

The scale can operate continuously by connecting directly to AC power or operate 70 hours on a fully charged battery.



WARNING! Only use the original adapter and battery that came with the scale. Using an alternative adapter or battery could damage the scale.

AC ADAPTER

Plug the AC adapter into the adapter socket on the right side of the scale.

BATTERY

The scale is equipped with a rechargeable battery.

- When the battery voltage is low, a battery symbol will appear in the lower left hand corner of the display. The scale will automatically turn off 30 minutes after the battery symbol appears.

CHARGING THE BATTERY

Plug the AC adapter into the scale to charge the battery. Scale does not need to be turned on. It will take 12 hours to fully charge the battery.

The charging indicator is located on the bottom left of the display, to the left of the word RECHARGE. The indicator light color will change to indicate the battery status:

- RED – Battery needs to be recharged.
- YELLOW – Battery is being charged.
- GREEN – Battery is fully charged.

BATTERY MAINTENANCE

Recharge battery every 3 months when not in use.

If the scale is not used for an extended period of time, remove the battery from the battery compartment to avoid leakage.

OPERATION

PRIOR TO USE

- Fully charge battery before using scale for the first time.
- Let the scale warm up for 15 minutes before use.



WARNING! NEVER drop items onto the platform. The scale is a sensitive precision instrument.



WARNING! Do not exceed the scale capacity and overload the scale.



WARNING! Do not stack items on the scale platform when the scale is not in use.

TURNING THE SCALE ON / OFF

Power switch is located on the right side of the scale.



CAUTION! Never power the scale on with weight on the platform.

- To turn the scale on, press the switch forward and hold. The scale will show the capacity and enter a self-test mode. After completing the self-test mode, the scale will enter the weighing application mode.
- To turn scale off, press the switch backward and hold.

CHANGE UNIT OF MEASURE

Press the **UNITS** key until the desired weighing unit appears – lb, oz, kg or g.



NOTE: UNITS key operation is active in the weighing and check weighing applications. The weighing unit must be selected prior to the counting, check counting and accumulation applications.

CALIBRATION

The scale is delivered pre-calibrated. There is no need to calibrate the scale unless you feel it has become inaccurate. You **MUST** use a precision test weight to properly calibrate the scale. The test weight **CANNOT** exceed the scale's capacity.



NOTE: Calibration can only be done in English system weight (lb).

CALIBRATION WEIGHTS

Model #	1/3 Weight	2/3 Weight	Full Capacity
H-5819	2 lb.	5 lb.	11 lb.
H-5820	7 lb.	17 lb.	27 lb.
H-5821	15 lb.	35 lb.	55 lb.
H-5822	30 lb.	60 lb.	110 lb.

FULL CAPACITY CALIBRATION

Use test weights of the scale's full capacity.

- Turn on the scale and press the **TARE** key during the self-test. "PO CAL" will be shown on the display.

PO CAL

- Press the **ZERO** key . "ULoAd" will be shown on the display.

ULoAd

- Remove all weight from the platform.
- Once the stable indicator is shown on the display, press the **ZERO** key . "LoAd" will be shown on the display.

LoAd

- Place the full scale capacity on the platform (in lbs.).
- Once the stable indicator is shown on the display, press the **ZERO** key . "SUCCES" will be shown on the display.

SUCCES

Scale will enter a self-test mode. After completing the self-test mode, the scale will enter the weighing application mode.

THREE-POINT CALIBRATION

Use test weights of 1/3, 2/3 and full weight capacity of the scale.

- Turn on the scale and press the **TARE** key during the self-test. "PO CAL" will be shown on the display.

PO CAL


- Press the **TARE** key to select Linear Calibration. "P I LCA" will be shown on the display.

P I LCA


OPERATION CONTINUED

3. Press the **ZERO** key . "LoAd 0" will be shown on the display.


LoAd 0

4. Remove all weight from the platform.
5. Once the stable indicator is shown on the display, press the **ZERO** key . "LoAd 1" will be shown on the display.


LoAd 1

6. Place 1/3 of the scale capacity on the platform (in lbs.).
7. Once the stable indicator is shown on the display, press the **ZERO** key . "LoAd 2" will be shown on the display.

LoAd 2


8. Place 2/3 of the scale capacity on the platform (in lbs.).
9. Once the stable indicator is shown on the display, press the **ZERO** key . "LoAd 3" will be shown on the display.

LoAd 3

10. Place the full scale capacity on the platform (in lbs.).
11. Once the stable indicator is shown on the display, press the **ZERO** key .

Scale will enter a self-test mode. After completing the self-test mode, the scale will enter the weighing application mode.




ZERO

If there is a minor weight displayed, without anything on the platform, press the **ZERO** key  to clear the display. Zero indicator will be shown on the display.

TARE

When weighing an item that is in a container, taring stores the container weight to memory so only the item weight is displayed.

To store the tare weight into memory and set the display to zero:

1. Place an empty container on the platform.
2. Press the **TARE** key . The NET indicator will be displayed on the bottom of the display.
3. The container's weight is then stored in the scale's memory and zero is displayed.
4. Add pieces to the container. As the pieces are added, their net weight will be displayed.
5. Press the **U/N/G**  key to display the unit weight, gross weight and net weight.
6. Removing the container from the platform will cause the scale to display the container's negative number. Pressing the **TARE** key  will readjust the scale to zero.

WEIGHING



NOTE: The scale is a sensitive precision instrument. **NEVER** drop items onto the platform. **NEVER** exceed the scale capacity.

Use this mode to weigh items.

1. Place item to be weighed on the scale platform. Weight will be shown in the display.

COUNTING





NOTE: The scale is a sensitive precision instrument. **NEVER** drop items onto the platform. **NEVER** exceed the scale capacity.




Use this mode to count parts of uniform weight.

SAMPLE OF UNIT WEIGHT

The scale cannot determine how many pieces are on a platform without a sample.




1. With nothing on platform, press the **ZERO** key . The zero indicator will be shown on the display.
2. Place the objects intended for sampling on the platform.
3. Press the **SAMPLE SIZE** key . Key in the sample quantity by using the numeric keys. This number will blink in the display.

OPERATION CONTINUED

- Press the **COUNT** key . Place remaining objects on the platform. The total quantity will be displayed.
- Press the **U/N/G** key  to display the unit weight, gross weight, and net weight.
- Press the **ZERO** key  to return to the Weighing mode.

MANUAL ENTRY OF UNIT WEIGHT

Known unit weights can be entered manually.

- Key in the unit weight by using the numeric keys. Press the **U.WT** key . Scale will display zero.
- Place the objects for counting on the platform. The total quantity will be displayed.
- Press the **U/N/G** key  to display the unit weight, gross weight, and net weight.
- Press the **ZERO** key  to return to the Weighing mode.

UNIT WEIGHT RECALCULATING

The unit weight will be averaged again if you add the remaining quantity gradually, by several lots. This will help eliminate errors caused by the possible weight variation among each object and lead to more accurate results.

When adding objects to the platform, be sure the quantity is LESS THAN those already on the platform. An alarm will sound a beep when the unit weight is averaged again.

LACK OF UNIT WEIGHT

The minimum weight must be at least 20 * the scale accuracy for accurate calculations.

Reference the table below for minimum weights.

Model #	Minimum Piece Weight	Minimum Sample Weight
H-5819	0.002 lb.	0.00005 lb.
H-5820	0.01 lb.	0.00025 lb.
H-5821	0.02 lb.	0.005 lb.
H-5822	0.04 lb.	0.001 lb.

If the unit weight is too light, another scale is needed. Continuing to use this scale will result in less accurate results.

CHECK WEIGHING



NOTE: The scale is a sensitive precision instrument. **NEVER** drop items onto the platform. **NEVER** exceed the scale capacity.





Use this mode to set a number for a weighing check. When the weight of the objects on the platform is less than or larger than the preset checking number, the indicators in the lower right hand corner of the display will show "HI" or "LOW".

Alarm beeping sounds can be enabled to beep when weights are in or out of limits. See page 8 to enable.

SET CHECK WEIGHT

- Press the **MODE** key  until "CH nEt" is shown on the display.

CH nEt

- To set the high limit, press the **HI** key . Current high limit will be shown on the display.
- Key in the high limit by using the numeric keys and press the **ZERO** key .
- To set the low limit, press the **LO** key . Current low limit will be shown on the display.
- Key in the low limit by using the numeric keys and press the **ZERO** key .





CHECK WEIGHT OPERATION

- Press the **MODE** key  until "CH nEt" is shown on the display.

CH nEt

- Place item to be weighed on the scale platform. Weight will be shown on the display. Scale indicators will show if weight is out of specified HI / LOW range.

CLEAR CHECK WEIGHT

- Press the **HI** key . Current high limit will be shown on the display.
- Enter 0 using the numeric keypad
- Press the **ZERO** key .
- Press the **LO** key . Current low limit will be shown on the display.
- Enter 0 using the numeric keypad
- Press the **ZERO** key .

CHECK COUNTING



NOTE: The scale is a sensitive precision instrument. NEVER drop items onto the platform. NEVER exceed the scale capacity.

Use this mode to set a number for a counting check. When the number of objects on the platform is less than or larger than the preset checking number, the indicators in the lower right hand corner of the display will show "HI" or "LOW".

SET CHECK COUNT

1. Press the **MODE** key until "**CH PCS**" is shown on the display.

CH PCS

2. To set the high limit, press the **HI** key . Current high limit will be shown on the display.
3. Key in the high limit by using the numeric keys and press the **ZERO** key .
4. To set the low limit, press the **LO** key . Current low limit will be shown on the display.
5. Key in the low limit by using the numeric keys and press the **ZERO** key .

CHECK COUNT OPERATION

1. Press the **MODE** key until "**CH PCS**" is shown on the display.

CH PCS

2. Place items to be counted on the scale platform. Total quantity will be shown on the display. Scale indicators will show if the total quantity is out of specified HI / LOW range.

CLEAR CHECK COUNT

1. Press the **HI** key . Current high limit will be shown on the display.
2. Enter 0 using the numeric keypad.
3. Press the **ZERO** key .
4. Press the **LO** key . Current low limit will be shown on the display.
5. Enter 0 using the numeric keypad
6. Press the **ZERO** key .

ACCUMULATION



NOTE: The scale is a sensitive precision instrument. NEVER drop items onto the platform. NEVER exceed the scale capacity.

Use this mode to measure the cumulative weight or counting values of a sequence of items. The maximum number of samples is 99 entries or the scale capacity.

MANUAL ACCUMULATION

1. Follow steps above to weigh or count items on platform.
2. Once the stable indicator is shown on the display, press the **M+** key . "**AC I**" will be shown on the display and the total value will be displayed for two seconds. Weighing or counting value will be stored into memory. If a printer is connected, the data will print. Once data is stored, the M+ indicator will be lit up on the lower right hand corner of the display.

AC I

3. Remove items from platform. Display will return to zero or a negative value.
4. Add additional items to platform.
5. Once the stable indicator is shown on the display, press the **M+** key . New data will be added to memory. Continue until all data is added.

RECALL DATA

1. Press the **MODE** key until "**ACCU**" is shown on the display.

ACCU



NOTE: If unit weight was preset or added to memory, scale will automatically enter counting mode when accumulation mode is selected.

2. Press the **MR** key to display the total weighed value of items stored to memory. Number of accumulated values and total weighed value will be displayed for three seconds.
3. Press and hold the **MR** key to display the total counted value of items stored to memory. Number of accumulated values and total counted value will be displayed for three seconds

CLEAR DATA

1. Press the **MODE** key until "**ACCU**" is shown on the display.

ACCU


2. To clear weighing data stored to memory, press the **MC** key . "**CLEAR**" will be shown on the display.
3. To clear counting data stored to memory, press and hold the **MC** key . "**CLEAR**" will be shown on the display.

SETUP MENU CONTINUED





ENABLE AUTOMATIC ACCUMULATION

At start-up, the automatic accumulation mode is not enabled. Enter this menu to turn the automatic accumulation mode on or off.

- AU on – Automatic Accumulation is on.
- AU off – Automatic Accumulation is off.
- P/Cont – Continuously send data to PC.
- **ASF** – *Send current data to printer.*

1. Turn on the scale and press the **TARE** key  during the self-test. "PO CAL" will be shown on the display.


PO CAL

2. Press the **TARE** key  until "P5 RLo" is shown on the display.
3. Press the **ZERO** key  to enter the menu.
4. Press the **TARE** key  to change the setting.
5. Press the **MODE** key  to exit the Setup Menu.






BACKLIGHT

At start-up, the backlight will automatically turn on when the scale is in use. Enter this menu to change the backlight setting.

- AUTO – Backlight automatically turns on when the scale is in use.
- OFF – Backlight is never on.
- ON – Backlight is always on.

1. Turn on the scale and press the **TARE** key  during the self-test. "PO CAL" will be shown on the display.


PO CAL

2. Press the **TARE** key  until "P10bTL" is shown on the display.
3. Press the **ZERO** key  to enter the menu.
4. Press the **TARE** key  to change the setting.
5. Press the **ZERO** key  to select the new setting.
6. Press the **MODE** key  to exit the Setup Menu.






HI / LO LIMIT BEEPING SOUND

At start-up, the beeping sounds are set to no sound. Enter this menu to change the beeping sound setting.

- 1 – Beeping sounds between the limits.
- 2 – Beeping sounds outside of the limits.
- 0 – No beeping sounds.

1. Turn on the scale and press the **TARE** key  during the self-test. "PO CAL" will be shown on the display.


PO CAL

2. Press the **TARE** key  until "P11 bP" shows on display.
3. Press the **ZERO** key  to enter the menu.
4. Press the **TARE** key  to change the setting.
5. Press the **ZERO** key  to select the new setting.
6. Press the **MODE** key  to exit the Setup Menu.






AUTO POWER-OFF

When the auto power-off time is enabled, the scale will automatically turn off when there has been no load on the platform and the scale is stable at zero position for a specified period of time in minutes. At start-up, the scale will automatically turn off after 5 minutes.

- 0 – Auto power-off is off.
- 3 – Auto power-off at 3 minutes.
- 5 – Auto power-off at 5 minutes.
- 15 – Auto power-off at 15 minutes.
- 30 – Auto power-off at 30 minutes.

1. Turn on the scale and press the **TARE** key  during the self-test. "PO CAL" will be shown on the display.

PO CAL

2. Press the **TARE** key  until "P13 SP" is shown on the display.
3. Press the **ZERO** key  to enter the menu.
4. Press the **TARE** key  to change the setting.
5. Press the **ZERO** key  to select the new setting.
6. Press the **MODE** key  to exit the Setup Menu.