Brecknell

Model 405-LCD

Weigh Scale

User Manual

AWT35-100061
Issue AB

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Manual revision history

Current Issue	Date Created	Details of Changes
AA	June 2021	First draft created
AB	Dec 2021	Modified section 3

1 Introduction

1.1 General and Safety Information

The following information is crucial for user safety and general maintenance.

- The Model 405-LCD is for use in dry environments only.
- This product uses 4x AA batteries. Dispose of according to local laws and regulations.
- For best performance, allow sufficient warm-up time before use.
- Avoid extended exposure to extreme heat or cold. Optimum operation is at normal room temperature. See operating temperature range in the specifications table. Allow the scale to acclimate to room temperature before using.
- Electronic scales are precision instruments. Do not operate near cell phones, radios, computers, or other electronic devices that emit radio frequencies that may cause unstable readings.

Specifications

Model	405-LCD-06	405-LCD-15
Max. Capacity	6 kg (12 lb)	15 kg (30 lb)
Readability	1 g (0.002 lb)	2 g (0.005 lb)
Display Resolution	1:6000	1:7500
Min. Recommended Weight	20 g (0.1 lb)	40 g (0.1 lb)
Construction	Food grade 304 stainless steel pan, ABS plastic housing	
Weighing Units	kg / lb / g / oz / lb:oz	
Calibration unit	kg / lb	
Modes	Weighing	
Weight Display	1 backlit LCD display, 17.5mm (0.68") high, 5 1/2 digits, 7-segment	
Zero Range	Power-on zero range: calibration zero point±20%FS;ZERO key range: power-on zero±5%FS	
Tare Range	Up to 100%FS	
Stabilization Time	<3 seconds	
Operating Temperature	5° to 35°C (41°F to 95°F)	
Humidity Range	<90% relative humidity, non-condensing	
Power Supply	4*AA batteries or AC power adapter (9Vdc/600mA with central positive)	
Safe Overload Capacity	150% of capacity	
Platter Dimensions (L x W)	215 x 245 mm; 9.65" x 8.46"	
Scale Dimensions (L x W x H)	255 x 308 x 110 mm; 10.04" x 12.13" x 4.33"	

1.2 Unpacking and Setup

Follow the following steps for unpacking and setup:

1. 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.

2. Adjust the leveling feet until the bubble is centered in the circle of the level indicator (located on the front panel).

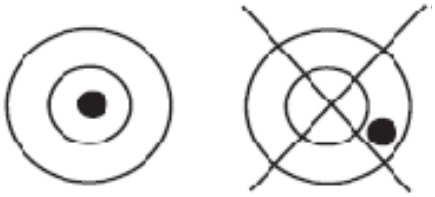


Figure 1.1 Level indicator orientation

NOTE: For best results, ensure that the scale is level before use.

3. For battery power usage, install 4 AA batteries (not included) into the battery compartment found on the underside of the scale. Batteries will allow up to 70 hours continuous usage without back-light.

4. Connect the supplied AC adapter to the power input found on the underside of the scale. Plug the AC adapter into a properly grounded power outlet.

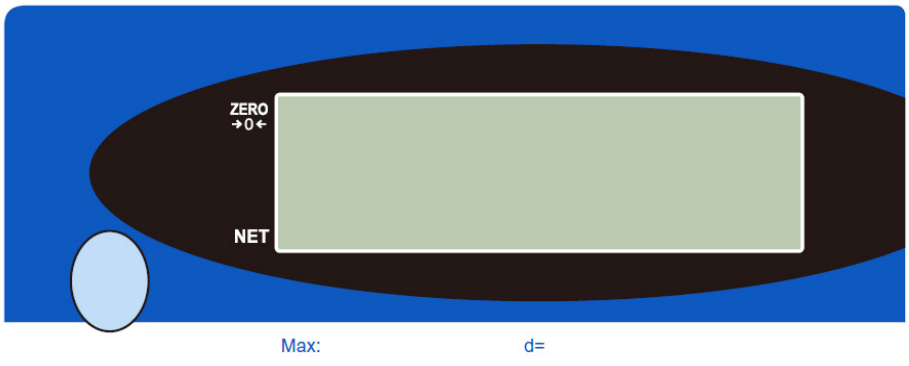
1.3 Contents

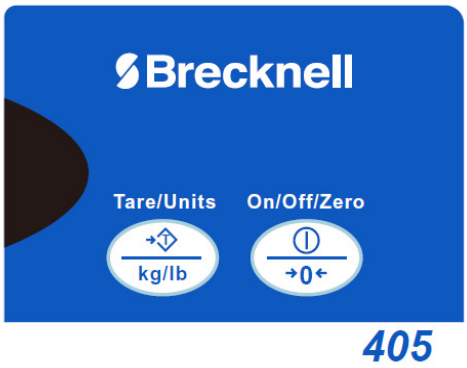
The following items are included with the Model 405-LCD scale:

- Scale
- 9Vdc/600mA adapter (supplied)
- 4 x AA batteries (not supplied)

2 Overview of Controls and Functions

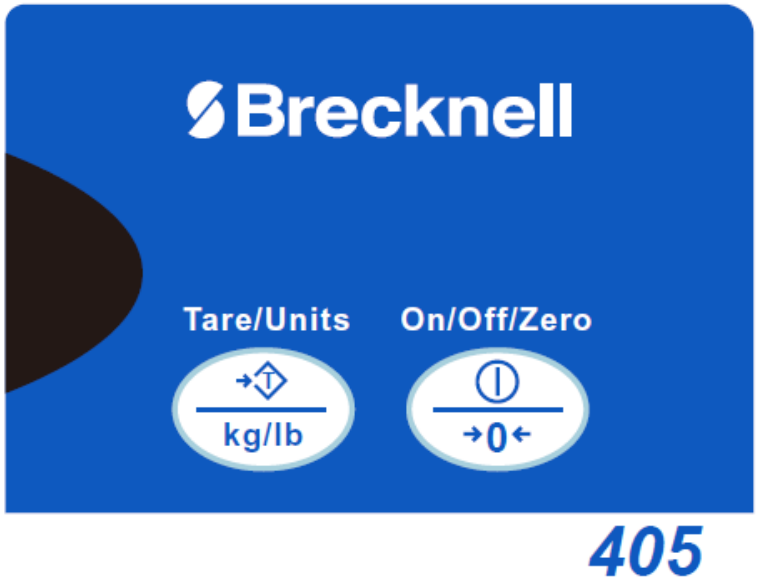
2.1 Front Display

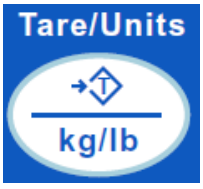




ASCII	LCD/LED Show	ASCII	LCD/LED Show	ASCII	LCD/LED Show
0		A		N	
1		B		O	
2		C		P	
3		D		Q	
4		E		R	
5		F		S	
6		G		T	
7		H		U	
8		I		V	
9		J		W	
		K		X	
		L		Y	
		M		Z	

2.3 Key Functions



Button	Functions	
	Short Press: (when off) (when on)Long Press: (when on)	Power on the scale Sets display to zero Power off the scale
	Short Press: Long Press:	Tare a weight Switch between unit of measure

3 Operations

3.1 Power on/Power off scale

1. Place the scale on a flat, stable surface. Level the scale using the leveling bubble.
2. With the weighing platter empty, press the ON/OFF/ZERO key to power the scale on. The scale will run a display check before showing the software version "V08," followed by the full capacity of the scale. After this, the scale will automatically Zero, ready for use.

NOTE: The scale will only Zero in if the weight on the sale is within +/- 20% of the calibration zero point. If the scale does not zero on start up, the scale may need to be recalibrated.

3. To power off the scale, press and hold the ON/OFF/ZERO key.

3.2 Changing Units of Measure

In normal weighing mode, press and hold the TARE/UNIT key to switch the measuring units between lb, kg, g, oz, lb:oz.

3.3 Zeroing the Display

You can press the ON/OFF/ZERO key at any time to re-zero the scale.

The ZERO key is used to zero off any weight readings shown on the weight display window. The ZERO key can only zero off weight that is within a +/- 5% of full scale's capacity.

Zeroing can only take place if the display reading is stable. If the weight is over or under zero range, the scale will automatically display "0------" or "0____" for 2 seconds.

3.4 Normal Weighing Mode

When scale is powered on and displaying 0.000, place the object to be weighed on the platform. The display will show the weight and units of weight being used.

3.5 Taring

The tare can be used in several ways. This includes removing the weight of a container so only the weight of the ingredient inside the containers is displayed to ingredients recipe control.

The scale weight is tared off between each ingredient to give the operator full viability of the weigh of each ingredient added.

1. Zero the scale by pressing the ON/OFF/ZERO key.
2. Place an empty container on the scale and press the TARE/UNIT key. The scale's display will now show a Net Zero reading and the NET annunciator will now be displayed.
3. Place the product to be weighed inside the container on the scale.The scale will display just the weight of the product only and not the weight of the container.

NOTE: TARE range for this scale is up to 100% full scale capacity.

To remove a Tare, first remove the container from the scale and then press the ON/OFF/ZERO key. The display will zero and the NET annunciator will turn off. The Zero Annunciator will then be displayed on.

3.6 Calibration

Before calibration can start, make sure you have the correct calibrated weights to calibrate the scale and that the scale is on a flat level surface. To calibrate the scale, you will need the full scale capacity in weights 6kg or 12lb and 15kg or 30lb.

1. With the scale off and with no load on the scale and in the off position, press and hold down the TARE/UNIT button and the ON/OFF/ZERO button at the same time until CAL-0 appears on the display. Release the two buttons.
2. With no weight on the scale, press ON/OFF/ZERO key until "0 in CAL-0" is flashing.
3. When CAL-F is displayed, press and hold the TARE/UNIT key to choose the calibration units of measure (kg or lb). Now load the full capacity of weight onto the platter and press the ON/OFF/ZERO key. The letter F in CAL-F will start to flash.
4. When CAL-0 appears again, remove the weight from the platter and press the ON/OFF/ZERO key. 0 in CAL-0 will flash.
5. If the calibration was successful, the scale will automatically return to normal weighing mode. If CAL-Er is displayed, there is an error in calibration and the scale needs to be re-calibrated.
6. To exit calibration mode, press and hold the ON/OFF/ZERO key.

3.7 AUTO-OFF and BACKLIGHT settings

Auto-Off Setting

If the scale has no movement or key presses in this period of time, the scale will automatically turn off to save battery life.

To change this setting, complete the following steps:

1. When the scale is on, press and hold the TARE/UNIT and ON/OFF/ZERO keys until “SETUP” is displayed, followed by “A.oFF.1.”
    - A.oFF.1 = The scale will automatically turn off after 1 minutes of inactivity.
    - A.oFF.2 = The scale will automatically turn off after 2 minutes of inactivity.
    - A.oFF.3 = The scale will automatically turn off after 3 minutes of inactivity.
    - A.oFF.4 = The scale will automatically turn off after 4 minutes of inactivity.
    - A.oFF.5 = The scale will automatically turn off after 5 minutes of inactivity.
    - A.oFF.6 = The scale will automatically turn off after 6 minutes of inactivity.
    - A.oFF.7 = The scale will automatically turn off after 7 minutes of inactivity.
    - A.oFF.8 = The scale will automatically turn off after 8 minutes of inactivity.
    - A.oFF.9 = The scale will automatically turn off after 9 minutes of inactivity.
    - A.oFF.0 = The scale will remain on until the on/zero off key is presses.
2. To change auto-off timer, press the TARE/UNIT key to select the auto-off time then press the ON/OFF/ZERO key to confirm and save the setting.
3. Press the ON/OFF/ZERO key again to return to weighing mode.

Back-light Setting

The back light has 3 settings, with the default being set to "BLt.2."

- “BLt. 0”: Back light is alway off
- “BLt.1”: Back light is always on
- “BLt.2”: Back light is on for 10 seconds if there is weight monument or a key is pressed

1. To change this setting with the scale on, press and hold the TARE/UNIT and ON/OFF/ZERO key until “SETUP” is displayed, followed by “A.oFF.1.”
2. Press ON/OFF/ZERO keys until "BLt.2" is displayed.
3. Press TARE/UNIT key to select back light setting needed and press ON/OFF/ZERO key to save setting and return back to weighing mode.

3.8 Display symbol

- 0------: Power-on zero-point is over (calibration zero-point) +20% full scale capacity) when scale is turned on, or the reading weight is over (power-on zero-point) +5%FS when pressing ZERO key
- 0_ _ _ _ _ _: Power-on zero-point is below (calibration zero-point) -20% full scale capacity) when scale is turned on, or the reading weight is + (power-on zero-point) -5%FS when pressing ZERO key
- -------: The current weight is over 100% full scale capacity+9d
- CAL-0: Zero point at calibration
- CAL-F: Full capacity at calibration
- CAL-Er: Calibration error

- EEP. Er: EEPROM accessing error or data in EEPROM is not in its normal range
- Lo.bAt: The voltage of internal function is below 5.7V(+0.1V)

3.9 Troubleshooting

SYMPTOM	PROBABLE CAUSE	REMEDY
Will not power on	Power cord not plugged in or properly connected. Power outlet not supplying electricity. Battery is low. Other failure.	Check power cord connections. Make sure power cord is plugged into the power outlet. Check power source. Replace batteries.
Unable to zero the display or will not zero when turned on	Load on scale exceeds allowable limits. Load on scale is not stable. Load cell damage.	Remove load on scale. Wait for load to become stable.
Lo.bAt is shown	Battery is low.	Replace batteries.

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