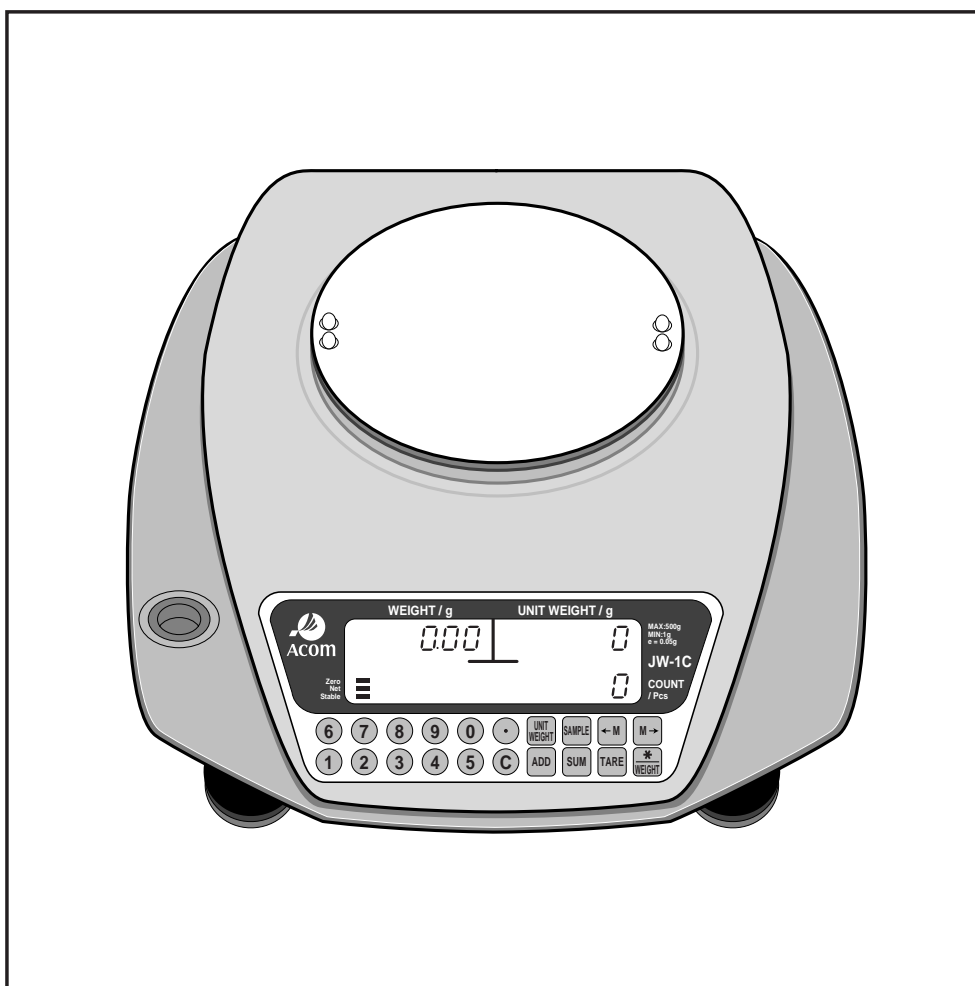


# **ACOM**

## **OWNER'S MANUAL**

### **MODEL : JW-1C**

### **COUNTING BALANCE**



**VER 1.00**

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## PREFACE

ACOM Corporation would like to thank you for purchasing our model JW-1C accurate counting balance. We are committed to creating high quality low maintenance products and supplying our customers with diligent customer service. This manual contains information on the proper assembly and use of the scale.

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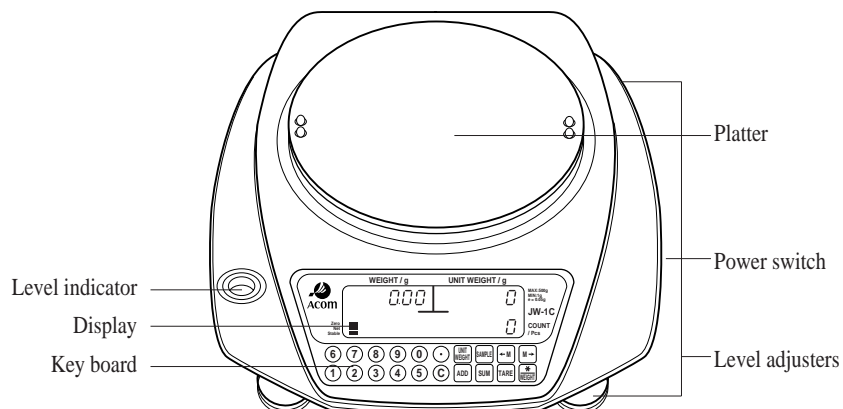
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## Specifications

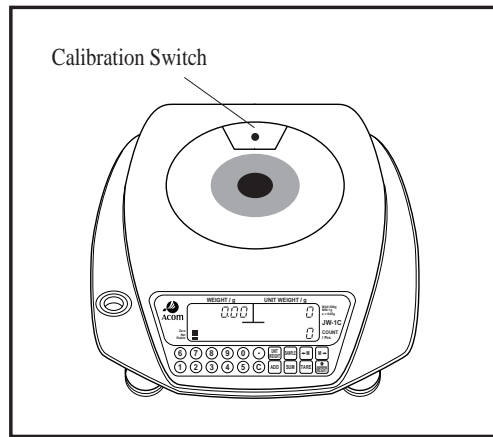
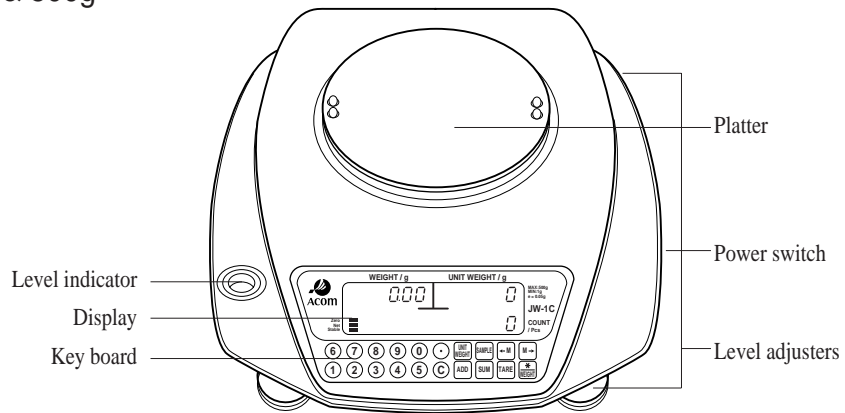
Model:	JW-1C			
Maximum Capacity:	200 g	500 g	1,000 g	2,000 g
Minimum Graduation:	0.02 g	0.05 g	0.1 g	0.2 g
Maximum Tare:	Full Capacity			
External Resolution:	1/10,000			
A/D Conversion Rate:	6 Updates / second (adjustable)			
Units & Modes:	gram, piece, percent, carat, ounce, pound, pennyweight, grain, kilogram, and Trojan ounce.			
LCD Display:	Weight: 5 Digits 99999 max			
	Unit Weight: 6 Digits 999999 max			
	Count: 6 Digits 999999 max			
Platter Size:	123 mm (4.84") Diameter		180 mm (7.09") Diameter	
Product Dimensions:	Width: 275 mm (10.82")			
	Depth: 235 mm (9.25")			
	Height: 70 mm (2.75")			
Product Weight:	1.1 kg (2.4 lb)			
Power Requirements:	Input: 115 Volts AC, @ 60 Hz			
	Output: 9 Volts DC, 300 mA			
	Battery: 6 AA Cells (6 x 1.5 = 9 VDC)			
Operating Temp:	10°C ~ 30°C (50° F ~ 86° F)			

## Nomenclature

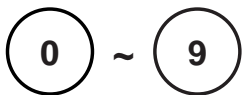
1000g & 2000g



200g & 500g



## Function Keys



Numeric keys, used to enter piece weight, tare, programming, etc.



Clear key, used to release error conditions and to clear erroneous entries.



Zero key, used to manually set the zero point.



Tare key, used to enter tares and clear tares.



Decimal Point key, used to enter a decimal point.



Unit Weight key, used to enter the piece weight. The piece weight is also called the unit weight.



Sample key, used to take samples from a known count and determine the piece weight.



Add key, used to add the current count to a running total.



Sum key, used to totalize the running total generated by the Add key.

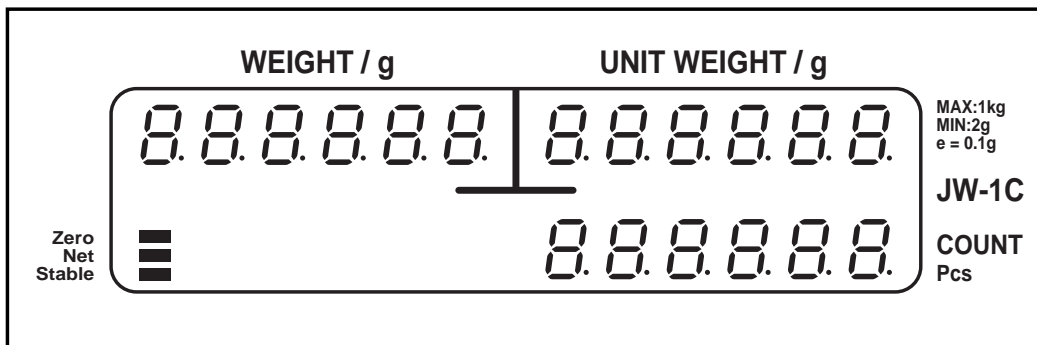


Memory Write key, used to store PLUs.



Memory Recall key, used to recall PLUs.

## Display



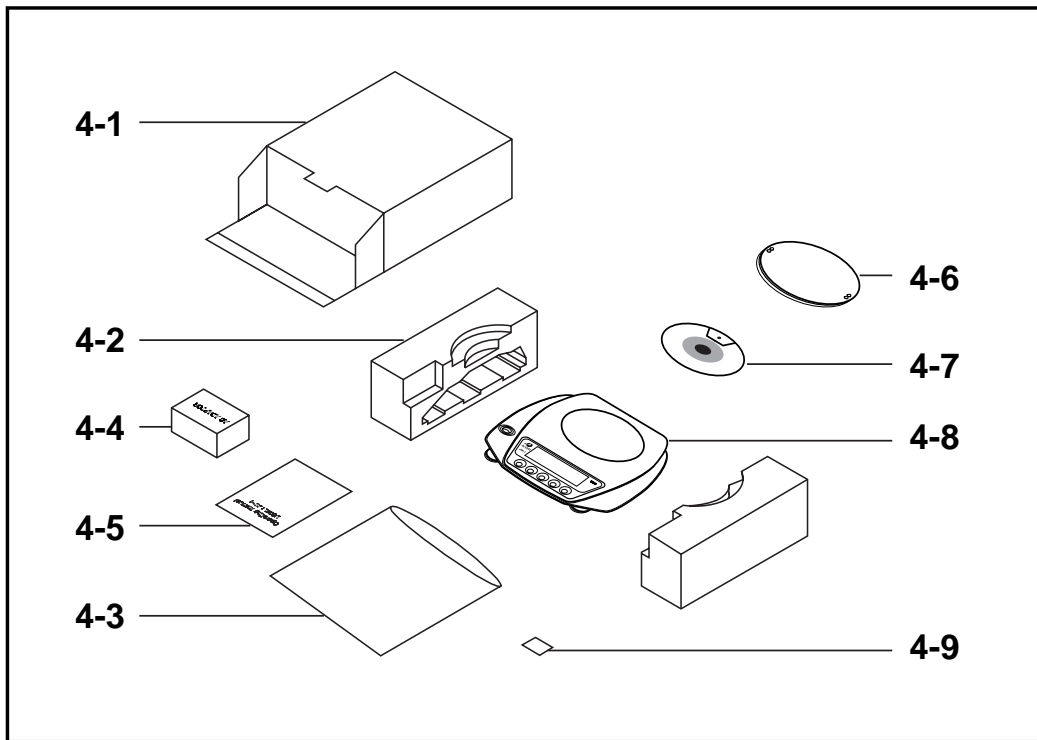
Zero lamp indicates that the balance is at net or gross zero.

Net lamp indicates that there is a tare set and that the displayed weight is the net weight. When it is off, it means that the displayed weight is the gross weight.

Stable lamp indicates that the weight on the balance is stable.

## Unpacking & Assembly

Your JW-1C balance should come with the following:



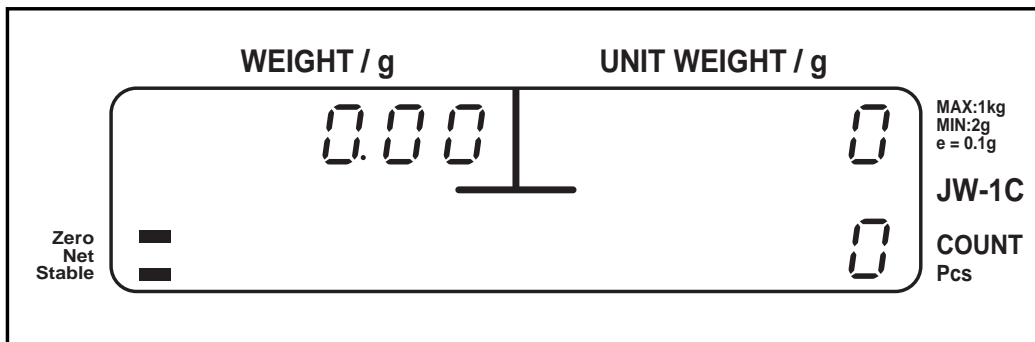
NO	Parts Name	Units	QTY
4-1	IN CARTON BOX	EA	1
4-2	STYROFOAM	EA	2
4-3	BODY POLY BAG	EA	1
4-4	ADAPTER	EA	1
4-5	MANUAL	EA	1
4-6	PLATTER	EA	1
4-7	PLATFORM	EA	1
4-8	BALANCE	EA	1
4-9	SILICA DESICCANT	EA	2

## Safety Precautions

- Place the balance on a flat and rigid surface
- Place the balance far from strong RF interference
- Level the balance using its adjustable feet
- Do not subject the platter to sudden impacts
- Do not spill the water or any other liquid on the balance
- Do not use any solvents to clean the balance
- Do not leave the balance in direct sunlight

## Operating the Balance

Make sure the platter is sitting properly on top of the platform and that there is nothing on top of the platter. Also, make sure that the balance is plugged into the proper outlet. Place the power switch into the ON position. The balance displays will run through a self test, count down to zero, and then beep. All of your displays should look as follows (remember that the decimal place and number of zeros on the Weight display may differ depending on the capacity of the balance):



This example is the JW-1C 200g balance.

### Manual Tare Entry

1. Make sure the Zero and Stable Lamps are on.
2. Type the tare weight of the item that you wish to tare. **Do not use the decimal point key** as the balance will always automatically insert the decimal point.
3. Press the TARE key.

### **Platter Tare Entry**

1. Make sure the Zero and Stable Lamps are on.
2. Place the item you wish to tare onto the platter.
3. Make sure that the Stable Lamp is on.
4. Press the TARE key.

### **Counting by Unit Weight Entry**

1. Make sure the Zero and Stable Lamps are on.
2. Follow the platter or manual tare entry procedures if necessary.
3. Place the parts that you wish to count on the platter.
4. Type the unit weight. You may use the decimal key if necessary.
5. Make sure that the Stable Lamp is on.
6. Press the UNIT WEIGHT key.

Steps 3 & 4 can be interchanged. The balance will now display a unit weight and a count. The balance may also flash the Ls or Lu Lamps depending on certain criteria specified on page 4. You can begin counting.

### **Counting by Sample Entry**

1. Make sure the Zero and Stable Lamps are on.
2. Follow the platter or manual tare entry procedures if necessary.
3. Place the parts that you wish to count on the platter.
4. Enter the number of parts that you placed on the platter by using the numeric keys. You cannot use the decimal key.
5. Make sure that the Stable Lamp is on.
6. Press the SAMPLE key.

Steps 3 & 4 can be interchanged. The balance will now display a unit weight and a count. You can begin counting.

### **Counting by Using PLUs**

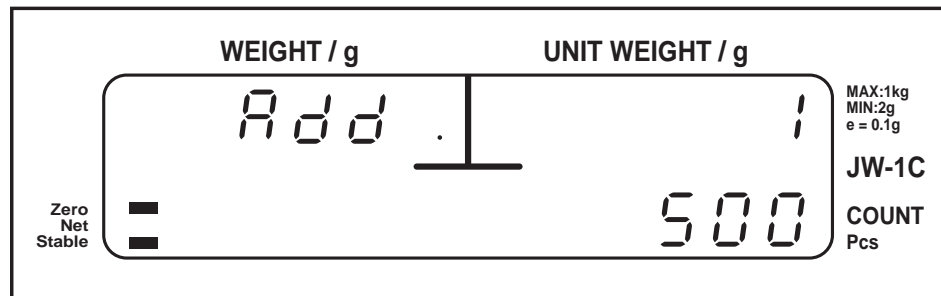
1. Make sure the Zero and Stable Lamps are on.
2. Place the parts that you wish to count on the platter.
3. Enter the PLU number of the part that you wish to count. PLU numbers range from 0 to 31.
4. Make sure that the Stable Lamp is on.
5. Press the ←M key.

Steps 2 & 3 can be interchanged. The balance will now display a unit weight and a count. You can begin counting.

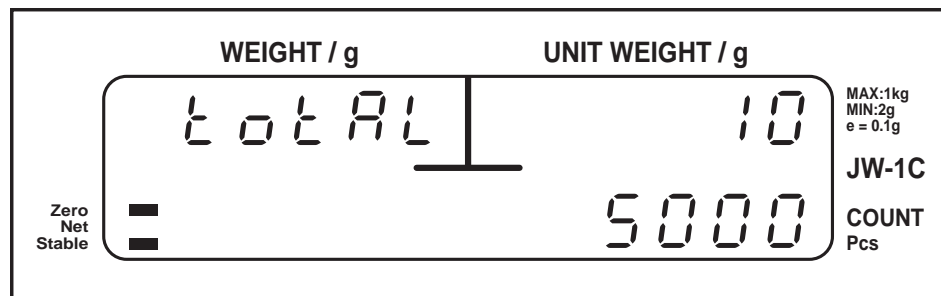


### Using the ADD Function

1. Get into counting mode by using any of the 3 ways of counting (counting by unit weight, sample, or PLU.)
2. Place the batch of parts that you wish to add onto the platter.
3. Make sure that the Stable Lamp is on.
4. Press the ADD key. The displays will show:



5. The Count display above shows 500 as an example.  
*The number in the Count Display represents the Running Total Count.  
The Number in the Unit Weight display shows the number of times batches have been added to the Running Total Count.*
6. Remove the batch of parts that have just been added.
7. If there is another batch of parts you wish to add go to step 2 otherwise continue on to step 8.
8. Press the SUM key. The displays will show:

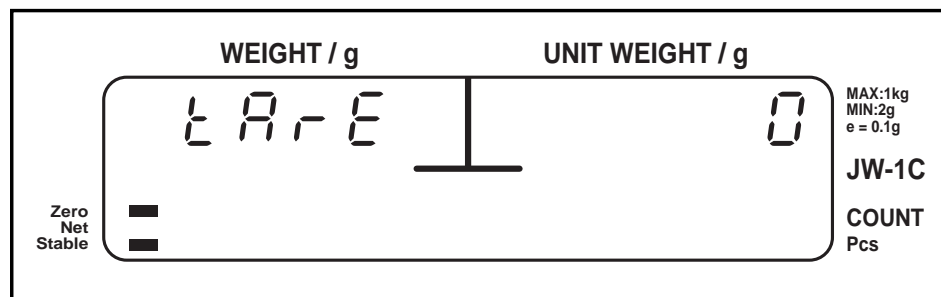


9. The Count display above shows 5000 as an example.  
*The number in the Count Display represents the Running Total Count.  
The Number in the Unit Weight display shows the number of batches that have been added to the Running Total Count.*
10. If you wish to add more batches then press the SUM and return to step 2; otherwise, you can press the C key to clear the current Running Total and start a new one.

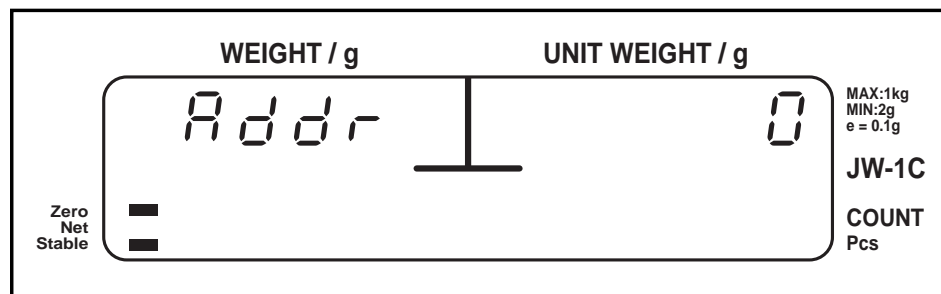
## Program Mode

### Programming PLUs by Sample:

1. Make sure the Zero and Stable Lamps are on.
2. Place the parts that you wish to count on the platter.
3. Enter the number of parts that you placed on the platter by using the numeric keys. You cannot use the decimal key.
4. Make sure that the Stable Lamp is on.
5. Press the SAMPLE key.
6. Press the M← key. The displays will show:



7. Enter the tare weight for this PLU using the numeric keys. You may use the decimal key if necessary.
8. Press the M← key. The displays will show:

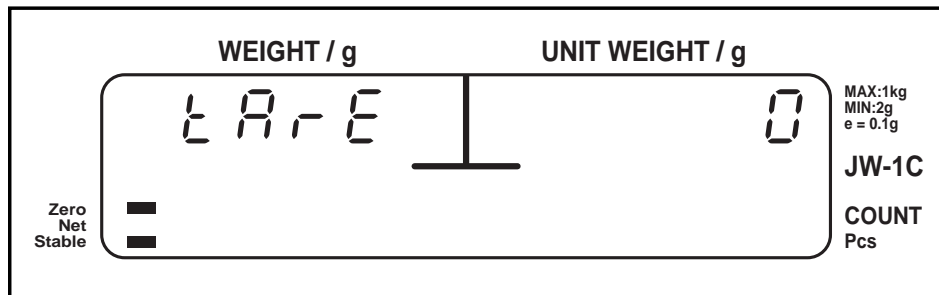


*The Number in the Unit Weight display represents the PLU number. It can range from 0 to 31 for a total of 32 PLUs.*

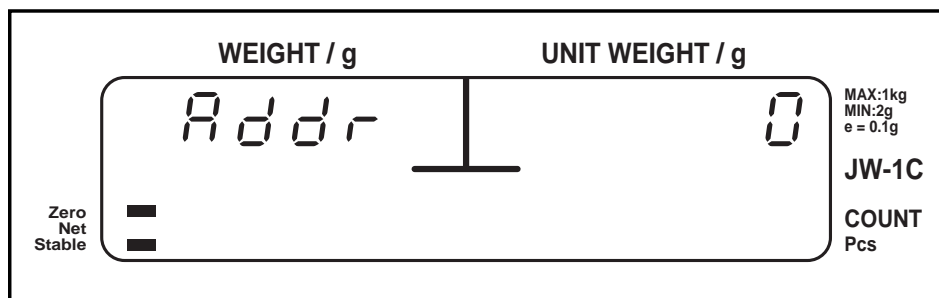
9. Enter the PLU number using the numeric keys. Keep in mind that if you use an existing PLU number it will be overridden by the new data that you have just entered.
10. Press the M← key. The PLU is stored.

### Programming PLUs by Unit Weight Entry:

1. Make sure the Zero and Stable Lamps are on.
2. Type the unit weight of the part. You may use the decimal key if necessary.
3. Press the M← key. The displays will show:



4. Enter the tare weight for this PLU using the numeric keys. You may use the decimal key if necessary.
5. Press the M← key. The displays will show:



*The Number in the Unit Weight display represents the PLU number. It can range from 0 to 31 for a total of 32 PLUs.*

6. Enter the PLU number using the numeric keys. Keep in mind that if you use an existing PLU number it will be overridden by the new data that you have just entered.
7. Press the M← key. The PLU is stored.

## Troubleshooting & Error Messages

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*Error Message Table*

Display	Definition	Solution
<i>ZErO</i>	Initial zero point failure.	Turn scale on with nothing on or obstructing the platter. Turn scale on with the platter properly placed on the scale.
<i>EEP</i>	E <sup>2</sup> PROM failure.	Contact Service.
<i>AdC</i>	A/D Converter failure.	Contact Service.
<i>PARA</i>	Lost memory.	Possibly reprogram and recalibrate. Contact Service.

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## Calibration

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The following procedure describes how to Zero Calibrate and Span calibrate the balance. These two are always done together.

### Calibration

1. Turn scale off and remove the platter.
2. Locate the CAL Switch (rear of platform).
3. Press and hold down the CAL Switch while you turn on the scale.
4. Once the display reads *SPAN*, release the CAL Switch.
5. Replace the platter on the platform.
6. Press the ★ key.
7. After the STABLE lamp turns on, press the ★ key.
8. The scale will display *rERd* and then show *FULL*.
9. Press the ★ key.
10. Once the STABLE lamp turns on, place the mass weight on the platter.  
***This mass must be equal to exactly the balance's capacity in grams.***
11. After the STABLE lamp turns on, press the ★ key.
12. The scale will display *rERd*, then show *End*, and then show *SELF*.<sup>†</sup>
13. Remove mass weight from the platter.
14. Turn scale off and then back on.

<sup>†</sup>**NOTE:** The balance may show *HHHHHH* or *LLLLLL* at this point instead of *End*.

If it displays *HHHHHH* then the mass weight that you are using to calibrate is too heavy or the scale may need servicing (the load cell may have been overloaded or shock loaded.)

If it displays *LLLLLL* then the mass weight that you are using to calibrate is too light or the scale may need servicing (the scale may have been dropped or mistreated.)

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