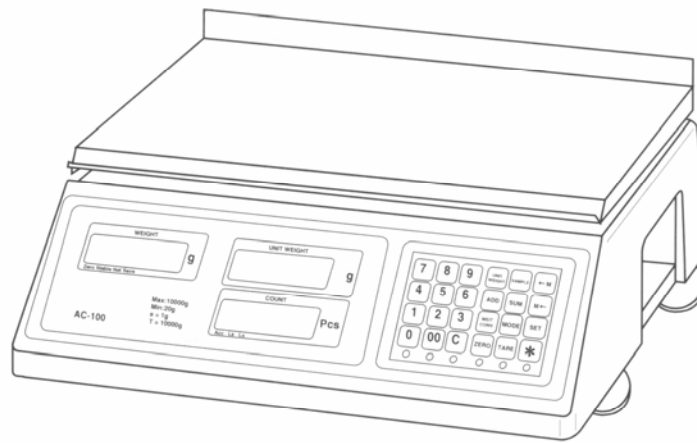


Easy Weigh®

OWNER'S MANUAL

MODEL: AC-100

ADVANCED COUNTING SCALE



VER 1.00

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PREFACE

Easy Weigh[®] would like to thank you for purchasing our model AC-100 Advanced Counting scale. 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.

Disclaimer:

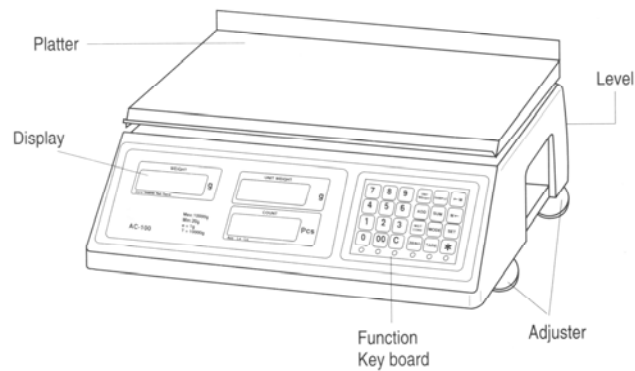
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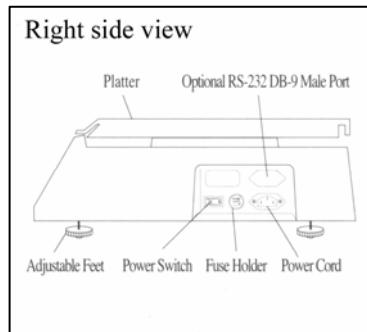
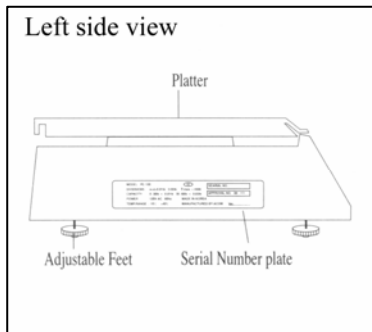
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Specifications

Model:	AC-100			
Maximum Capacity:	10 lb (5 kg)	20 lb (10 kg)	50 lb (20 kg)	100 lb (50 kg)
Minimum Graduation:	0.001 lb (0.5g)	0.002 lb (1 g)	0.005 lb (2 g)	0.01 lb (5 g)
Maximum Tare:	Full Capacity			
Internal Resolution:	200,000 Counts (1/100,000 minimum)			
A/D Conversion Rate:	6 Updates / second			
Indirect PLUs:	200			
Vacuum Fluorescent Displays:	Weight:	5 Digits,	999.99	(60 lb max)
	Unit Price:	6 Digits,	9999.99	max
	Total Price:	6 Digits,	9999.99	max
Platter Size:	Width:	350 mm / 13.8"		
	Length:	270 mm / 10.6"		
Product Size:	Width:	365 mm / 14.4"		
	Length:	365 mm / 14.4"		
	Height:	160 mm / 4.0"		
Power Requirements:	120 Volts AC @ 60 Hz			
Operating Temp:	- 10 °C ~ 40 °C			
Humidity	RH 35% ~ 85%(no condensation)			
Power consumption	Approx. 6 Watt			
Fuse rating	250V / 0.2A			

Nomenclature



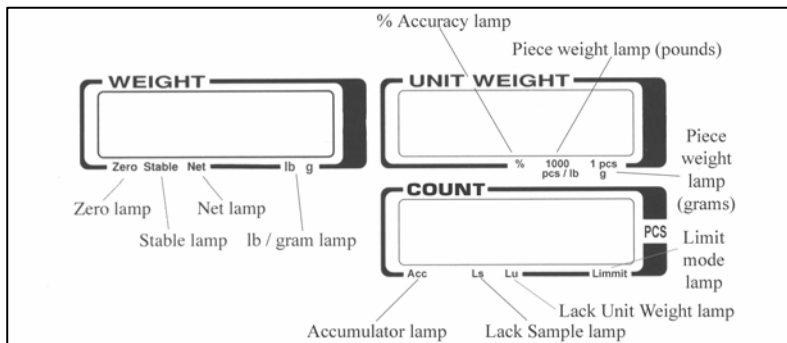


Function Keys

- | | |
|---|---|
| <div style="border: 1px solid black; padding: 2px; display: inline-block; width: 30px; height: 30px; text-align: center; line-height: 30px;">0</div> ~ <div style="border: 1px solid black; padding: 2px; display: inline-block; width: 30px; height: 30px; text-align: center; line-height: 30px;">9</div> | Numeric keys, used to enter piece weight, tare, programming, etc. |
| <div style="border: 1px solid black; padding: 2px; display: inline-block; width: 30px; height: 30px; text-align: center; line-height: 30px;">C</div> | Clear key, used to release error conditions and to clear erroneous entries. |
| <div style="border: 1px solid black; padding: 2px; display: inline-block; width: 30px; height: 30px; text-align: center; line-height: 30px;">ZERO</div> | Zero key, used to manually set the zero point. |
| <div style="border: 1px solid black; padding: 2px; display: inline-block; width: 30px; height: 30px; text-align: center; line-height: 30px;">TARE</div> | Tare key, used to enter tares and clear tares. |
| <div style="border: 1px solid black; padding: 2px; display: inline-block; width: 30px; height: 30px; text-align: center; line-height: 30px;">.</div> | Decimal Point key, used to enter a decimal point. |
| <div style="border: 1px solid black; padding: 2px; display: inline-block; width: 30px; height: 30px; text-align: center; line-height: 30px;">UNIT
WEIGHT</div> | Unit Weight key, used to enter the piece weight. The piece weight is also called the unit weight. |
| <div style="border: 1px solid black; padding: 2px; display: inline-block; width: 30px; height: 30px; text-align: center; line-height: 30px;">SAMPLE</div> | Sample key, used to take samples from a known count and determine the piece weight. |
| <div style="border: 1px solid black; padding: 2px; display: inline-block; width: 30px; height: 30px; text-align: center; line-height: 30px;">ADD</div> | Add key, used to add the current count to a running total. |
| <div style="border: 1px solid black; padding: 2px; display: inline-block; width: 30px; height: 30px; text-align: center; line-height: 30px;">SUM</div> | Sum key, used to totalize the running total generated by the Add key. |

- WEIT
CONV** Weight Conversion key, used to change from pound mode and gram mode.
- MODE** Mode key, used to switch between Limit Counting mode and Weight Counting mode.
- M←** Memory Write key, used to store PLUs.
- ←M** Memory Recall key, used to recall PLUs.
- *** * key, reserved for future use. Used to display percent accuracy.
- SET** Set key, used as enter key in Limit Counting mode.

Display



- Zero lamp** indicates that the scale is a gross zero.
- Stable lamp** indicates that the weight on the scale is stable.
- Net lamp** indicates that there is a tare set.
- lb / g lamps** indicate whether scale is displaying pounds or grams.
- Accumulator lamp** indicates that there is a running count total.
- Ls lamp** indicates a lack of sample condition.

Lu lamp indicates a lack unit weight condition.
% lamp indicates the percent of accuracy in counting.
1000 pcs / lb lamp indicates the weight in pounds per 1000 pieces.
1 pcs g lamp indicates the weight of one (1) piece in grams.
Limit mode lamp indicates that the scale is in Limit mode.

Accuracy Specifications

The Ls Lamp will flash when a sample's Total Weight is < 0.5% of capacity.				
Maximum Capacity:	10 lb (5 kg)	20 lb (10 kg)	50 lb (20 kg)	100 lb (50)
Minimum Graduation:	0.001 lb (0.5g)	0.002 lb (1 g)	0.005 lb (2 g)	0.01 lb (5 g)
0.5% of capacity:	0.050 lb (25 g)	0.100 lb (50 g)	0.250 lb (100 g)	0.50 lb (250 g)
1/100,000	0.0001 lb (0.05 g)	0.0002 lb (0.1 g)	0.0005 lb (0.2 g)	0.001 lb (0.5 g)

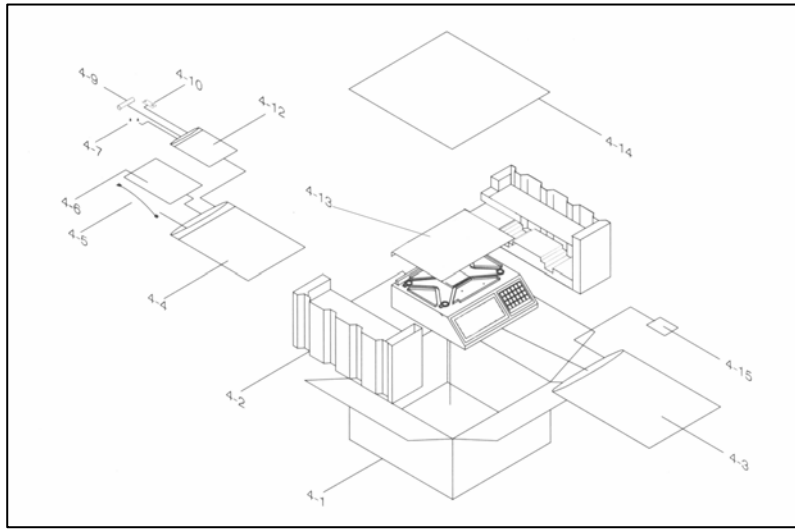
The Ls Lamp will turn off once the Weight on the platter surpasses 0.5% of the scale's capacity. When the Ls Lamp is flashing, it means that you need to use more parts in your sample in order to get improved accuracy. As you place more parts on to the platter, the scale will automatically re-sample. You will notice that re-sampling has taken place when the Weight display flickers after you add more parts to the platter.

The Lu Lamp will flash when a sample's Piece Weight is < 0.005% of capacity.				
Maximum Capacity:	10 lb (5 kg)	20 lb (10 kg)	50 lb (20 kg)	100 lb (50)
Minimum Graduation:	0.001 lb (0.5g)	0.002 lb (1 g)	0.005 lb (2 g)	0.01 lb (5 g)
0.005% of capacity:	0.0005 lb (0.25 g)	0.0001 lb (0.5 g)	0.0025 lb (1 g)	0.005 lb (2.5g)
1/100,000	0.0001 lb (0.05 g)	0.0002 lb (0.1 g)	0.0005 lb (0.2 g)	0.001 lb (0.5 g)

The Lu Lamp will turn off once the Unit Weight surpasses 0.005% of the scale's capacity. When the Lu Lamp is on, it means that the part you are trying to count is very close to the scale's minimum detectable weight of 1/100,000. This can affect the scale's accuracy. You can use the * key in order to get a better picture of how accurate your tally will be. The * key will display the percent accuracy value **only** after the scale automatically re-samples.

Unpacking & Assembly

Your AC-100 scale should come with the following:



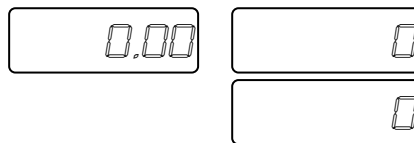
NO	Parts Name	Units	QTY
4-1	IN CARTON BOX	EA	1
4-2	STYROFOAM	EA	2
4-3	BODY POLY BAG	EA	1
4-4	MANUAL POLY BAG	EA	1
4-5	AC CORD	EA	1
4-6	MANUAL	EA	1
4-7	CAL SEALING BOLTS	EA	2
4-9	FUSE	EA	1
4-10	CAL PLATE AND SEAL	EA	1
4-12	FUSE POLY BAG	EA	1
4-13	STYROFOAM PAD	EA	2
4-14	BOX PAD	EA	1
4-15	SILICA DESICCANT	EA	2

Safety Precautions

- ❑ Place the scale on a flat and rigid surface
- ❑ Place the scale far from strong RF interference
- ❑ Level the scale using its adjustable feet
- ❑ Do not subject the platter to sudden impacts
- ❑ Do not spill the water or any other liquid on the scale
- ❑ Do not use any solvents to clean the scale
- ❑ Do not remove the safety ground on the power cord

Operating the Scale

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 scale is plugged into the proper outlet. Place the power switch into the ON position. The scale displays will run through a self test, count down to zero, and then beep. All of your displays should look as follows:



The number of significant digits on the weight display may vary depending on the scale's capacity and the current weighing unit being displayed.

Manual Tare Entry

1. Make sure the Zero and Stable Lamps are on.
2. Select the weighing unit you wish to use by pressing the WEIGHT CONV. Key.
3. Type the tare weight of the item that you wish to tare. **Do not use the decimal point key** as the scale will always automatically insert the decimal point.
4. Press the TARE key.

Platter Tare Entry

1. Make sure the Zero and Stable Lamps are on.
2. Select the weighing unit you wish to use by pressing the WEIGHT CONV. Key.
3. Place the item you wish to tare onto the platter.
4. Make sure that the Stable Lamp is on.
5. 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.
Remember that when you are in pound mode you are entering the Unit Weight for 1000 pieces not for 1 piece.
5. Make sure that the Stable Lamp is on.
6. Press the UNIT WEIGHT key.

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

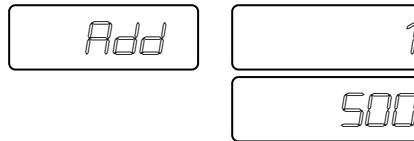
Counting by Using PLUs

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 199.
4. Make sure that the Stable Lamp is on.
5. Press the ←M key.

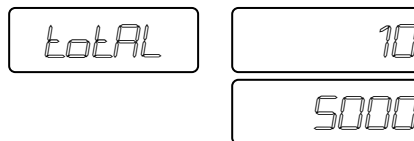
Steps 2 & 3 can be interchanged. The scale will now display a unit weight and a count. The scale may also flash the Ls or Lu Lamps depending on certain criteria specified on page 4. You can begin counting.

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:



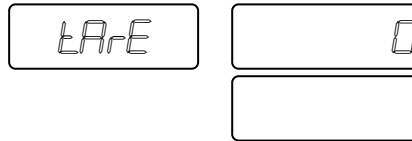
9. The Count display above shows 5000 as an example.
The number in the Count Display represents the Running Total Count.
The Number in the Unit Weight display shows the number of batches that have been added to the Running Total Count.
10. If you wish to add more batches then press the SUM and return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

When the Acc Lamp is on, it means that there is an active Running Total.

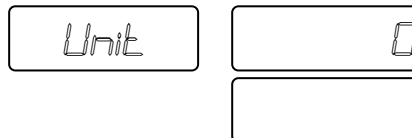
Program Mode

Programming PLUs by Sample:

1. Make sure the Zero and Stable Lamps are on.
2. Select the weighing unit you wish to use by pressing the WEIGHT CONV. Key.
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.
7. Press the M← key. The displays will show:



8. Enter the tare weight for this PLU using the numeric keys. You may use the decimal key if necessary. Keep in mind the weighing unit (pounds or grams) for this PLU when you enter the tare.
9. Press the M← key. The displays will show:



The Number in the Unit Weight display represents the Weighing Unit for the PLU: 0 = grams and 1 = pounds.

10. Press 1 for pounds or 0 for grams.
11. Press the M← key. The displays will show:

Addr	0

The Number in the Unit Weight display represents the PLU number. It can range from 0 to 199 for a total of 200 PLUs.

12. 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.
13. 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. **Remember that when you are in pound mode you are entering the Unit Weight for 1000 pieces not for 1 piece.**
3. Press the M← key. The displays will show:

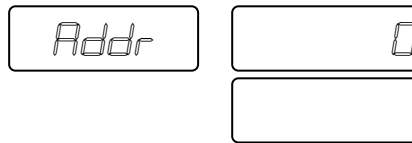
LArE	0

4. Enter the tare weight for this PLU using the numeric keys. You may use the decimal key if necessary. Keep in mind the weighing unit (pounds or grams) for this PLU when you enter the tare.
5. Press the M← key. The displays will show:

Unit	0

The Number in the Unit Weight display represents the Weighing Unit for the PLU: 0 = grams and 1 = pounds.

6. Press 1 for pounds or 0 for grams.
7. Press the M← key. The displays will show:

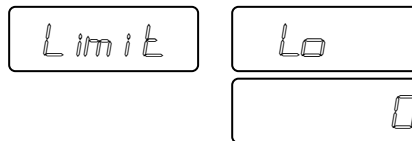


The Number in the Unit Weight display represents the PLU number. It can range from 0 to 199 for a total of 200 PLUs.

8. 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.
9. Press the M← key. The PLU is stored.

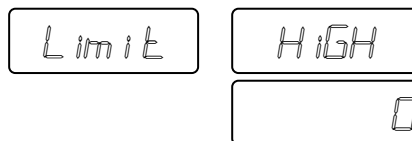
Programming & Using Hi and Lo Limits:

1. Make sure the Zero and Stable Lamps are on. Press the MODE key. The displays will show:



The Number in the Count display represents the low limit for Limit Counting. When you are counting:
if the **Current Count** > 0 and **Current Count** ≤ **Low** then the Limit Lamp will flash and the scale will continuously beep.

2. Enter the low limit using the numeric keys. If you do not want a low limit press the C key.
3. Press the SET key. The displays will show:



*The Number in the Count display represents the high limit for Limit Counting. When you are counting:
if the **Current Count** \geq **High** then the Limit Lamp will flash and the scale will continuously beep.*

4. Enter the high limit using the numeric keys. If you do not want a high limit press the C key.

5. Press the SET key.

To disable the use of Limit Mode simply enter 0 as the low limit and 0 as the high limit.

Options & Accessories

The following options are available through your Easy Weigh Authorized dealer:

Description	Part Number
Spill-Proof Overlay (Wet cover)	101-00001-020000
AC Power cord	690-00001-02002M
Adjusting feet (set of 4)	4B0-00001-020000

For any type of service or troubleshooting, please contact your nearest Easy Weigh Authorized dealer. DO NOT attempt to service, repair, or disassemble this or any scale as this is legally permissible to only licensed professionals.

Troubleshooting & Error Messages

Error	Description	Solution
Zero	Initial zero range error	Empty the platter, turn OFF and ON. If this occurs again then call service
AdC	Analog circuit failure	Call service
EEP	Memory failure	Call service
PArA	Parameter failure	Call service

For more information go to:
<http://www.atronsystems.com>



Easy Weigh

www.atronsystems.com

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800-10002-020000