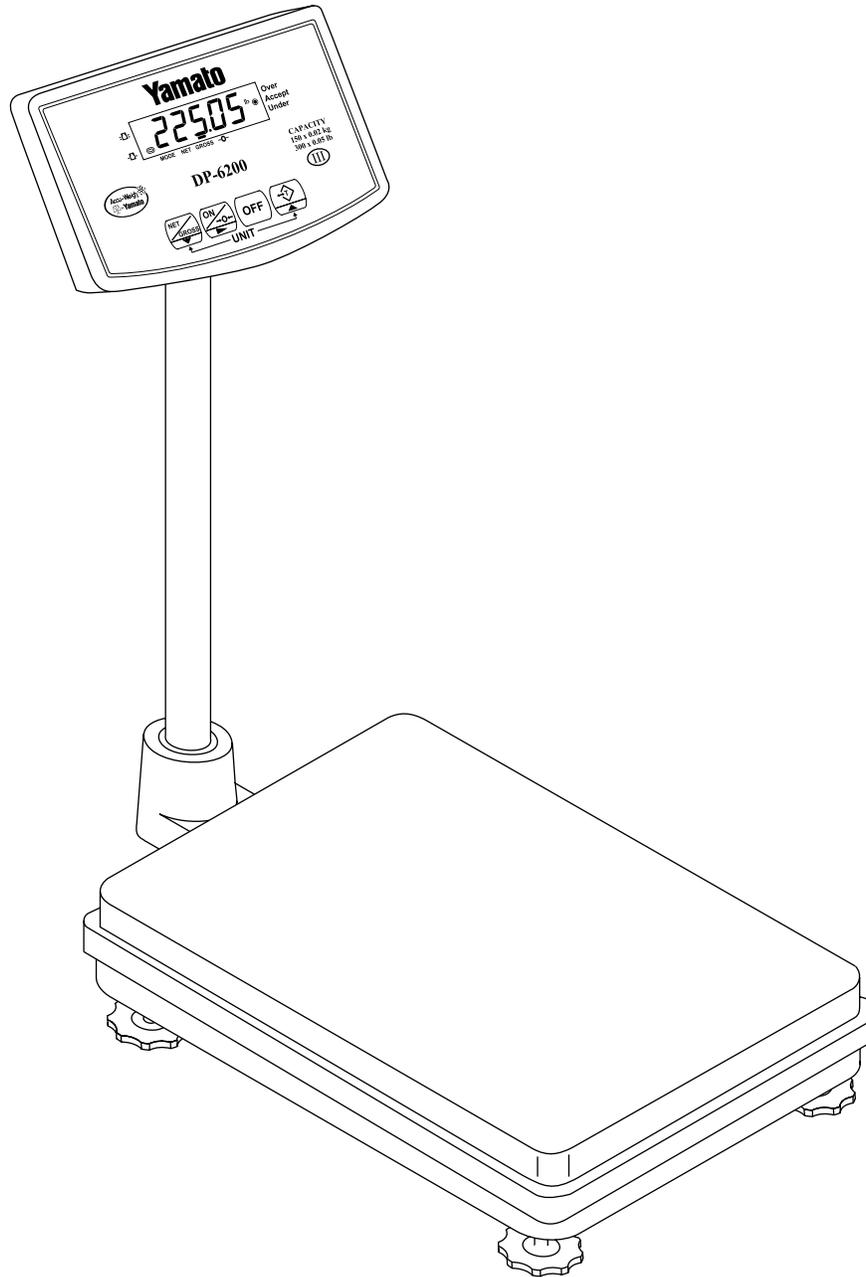


DP-6200

Operation Manual



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I Safety Instructions

Before using the scale, carefully read, understand, and follow the "Safety Instructions" described in this manual. Observe the advice given in the "Directions for Use" section to ensure proper operation. Keep this operation manual handy for reference.

To prevent injury

- 1) DO NOT SHOCK LOAD the scale, Never step on or sit on the scale. Not only will the scale be damaged, but you may also be injured.
- 2) DO NOT APPLY DIRECT WATER SPRAY to the scale if it is powered by an AC adaptor!! You could receive a shock. The scale is not washdown unless the AC jack is plugged with a water-tight seal.
- 4) Do not operate the scale if there is smoke or a burnt smell coming from the scale. Remove the batteries or unplug the AC adaptor immediately. After making sure that there is no danger, consult your dealer. **Never try to repair the scale by yourself.**
- 5) This scale is **not** an explosion-proof model. Do not use the scale in an atmosphere containing flammable gases or explosive fumes. A fire or an explosion can result.
- 6) Place the item to be weighed in the center of the platform. Items placed on the edge of the platform may fall off and cause injury.
- 7) When weighing a heavy, large or unbalanced item, make sure the item is stable on the platform, otherwise an accident may occur.
- 8) When carrying or moving the scale, be sure to hold it by the bottom of the weighing platform with both hands. If you hold it by the column, the column may become detached causing the scale to fall. This will damage the scale and could cause injury.
- 9) Do not insert your finger into the gap or holes in the scale. You may be injured.
- 10) The DP-6200 uses a liquid crystal display. If the LCD breaks and the liquid leaks from the LCD, do not touch it with your fingers. The liquid is toxic if ingested. Be especially careful around small children.

To prevent damage to the scale

- 1) Do not push the indicator or keys with sharp objects. They may break or puncture the switch membrane panel.
- 2) Use the specified power supply and choose a suitable environment. If you do not, the weight readings may be inaccurate and the scale may be damaged.
- 3) The scale is a sensitive weighing instrument, avoid physical shocks. If you drop something on the scale, overload the scale, step on the platform, or drop the scale, the scale may be damaged and lose accuracy.
- 4) If the scale becomes dirty, wipe it with a soft cloth. For stubborn stains, apply a little neutral detergent and then wipe the scale with a dry cloth. Do not use thinner, benzene, hot water, or chemical agents, all of which can cause deformation, discoloration, or deterioration of the scale.
- 5) Never remove the case. The fine adjustment section may be damaged and you may be injured by sharp edges on the internal parts.
- 6) Do not place the scale upside down.
- 7) When the low battery indicator appears, replace all six of the batteries. When installing the batteries, install them according to the polarity markings in the case (+, -). If the scale will not be used for a long period, remove the batteries.

To keep the scale working efficiently

- 1) Place the scale on a flat stable surface that will support the scale and the load.
- 2) Do not place the scale in an area exposed to direct sunlight or to wind currents from an air conditioner, otherwise, the measurements will not be accurate.
- 3) Do not place the scale near machines that create vibrations or electromagnetic disturbance, such as microwave ovens, portable phones, or large motors. This will affect the accuracy.
- 4) The operating temperature range is from -5°C to $+35^{\circ}\text{C}$ (23°F to 95°F). Do not subject the scale to sudden temperature changes; allow the scale to adjust to the new temperature before use.
- 5) If the scale is sealed, do not break the seal. If you break the seal, the scale will not be considered legal for trade. In this case, contact your dealer.
- 6) Do not disassemble or modify the scale, you will void the warranty. Modified scales will not be legal for trade.

II Description

Name and Function of Parts

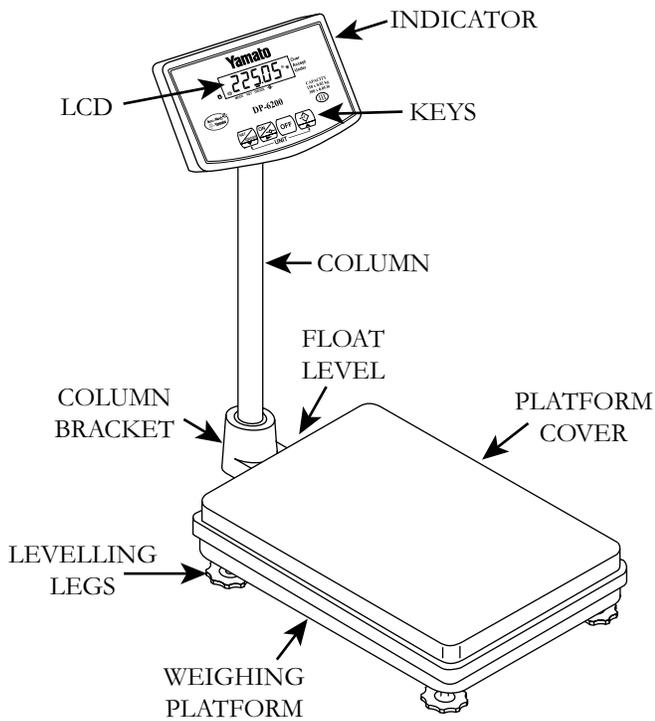


FIG. 1

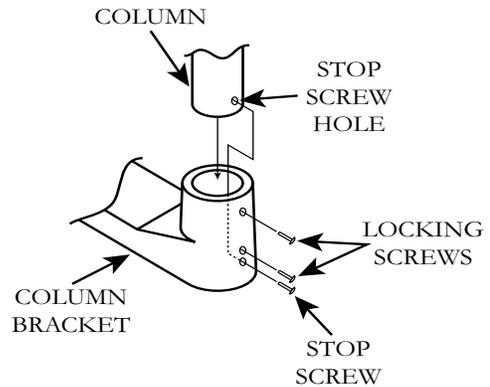


FIG. 2

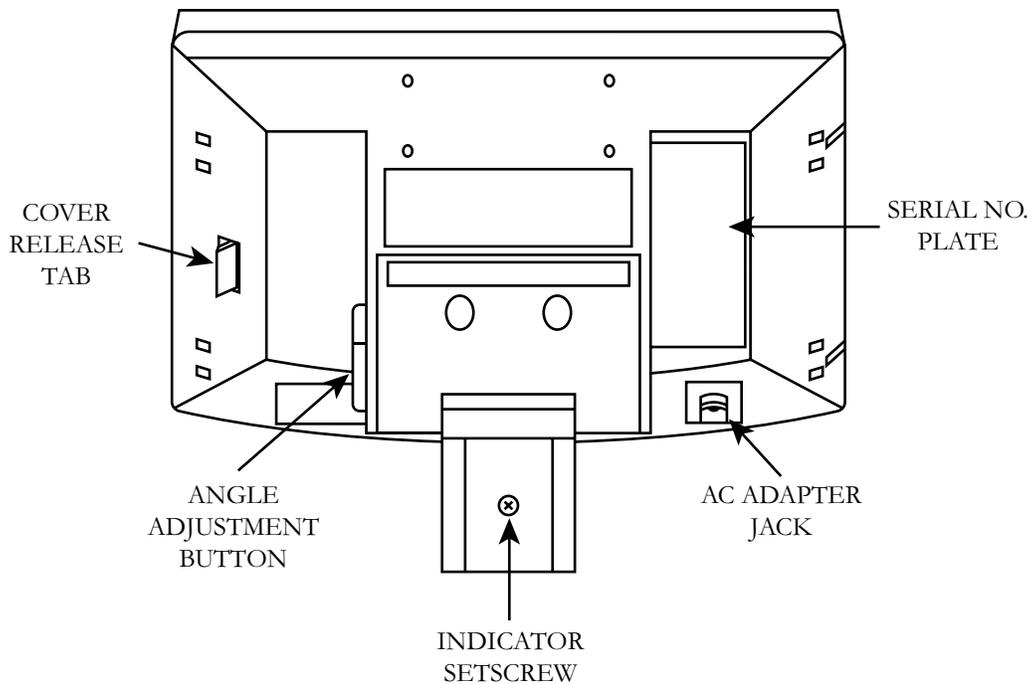


FIG. 3

II Description

Name and Function of Parts

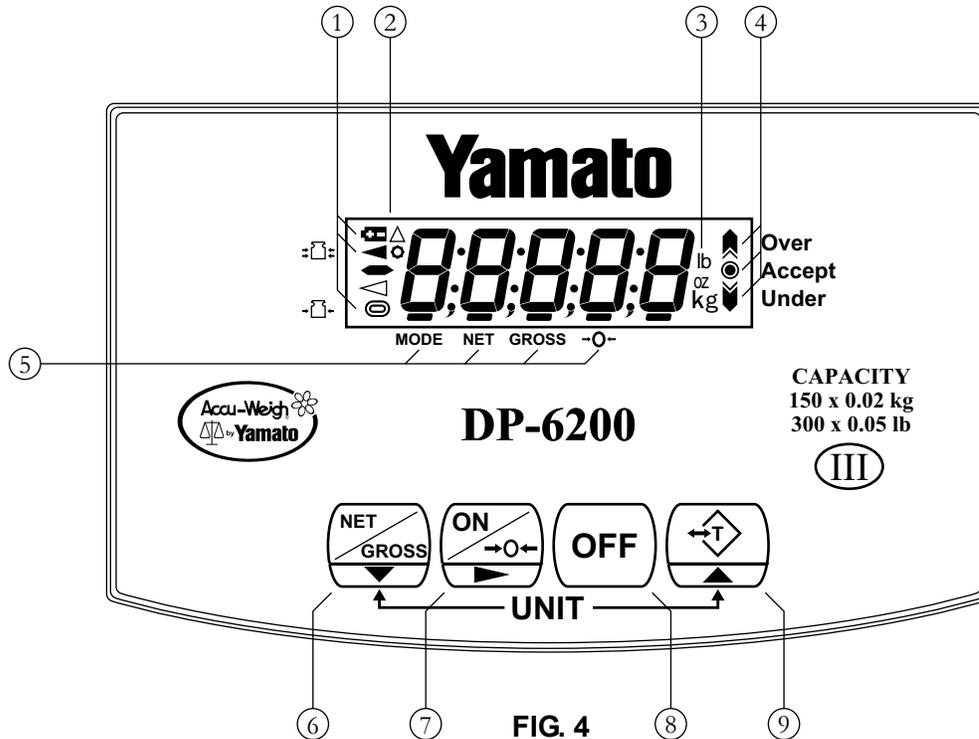


FIG. 4

- | | |
|---|---|
| <p>1) Low Battery Indicator
 Hold Indicator
 Test/Cal Mode Indicator
 Stable Indicator</p> <p>2) LCD Display</p> <p>3) Unit Indication</p> <p>4) Over Indicator
 Accept Indicator
 Under Indicator</p> <p>5) Mode Indicator
 Net Indicator
 Gross Indicator
 Center of Zero Indicator</p> <p>6) Net/Gross Key
 Decrease Key
 Unit Selection Key</p> <p>7) On/Zero Key
 Next Key</p> <p>8) Off Key</p> <p>9) Tare Key
 Increase Key
 Unit Selection Key</p> | <p>Time to replace the batteries.</p> <p>The scale is in Hold mode (not legal-for-trade).</p> <p>The scale is in Test or Calibration Mode.</p> <p>Indicates the weight indication is stabilized.</p> <p>Shows all scale indications and weight readings.</p> <p>KG, LB, OZ and LB-OZ (not legal-for-trade).</p> <p>The current weight is over the user's maximum setpoint.</p> <p>The current weight is within the user's setpoints.</p> <p>The current weight is below the user's minimum setpoint.</p> <p>The scale is in setup mode.</p> <p>The scale is indicating net weight.</p> <p>The scale is indicating gross weight.</p> <p>The scale is at gross zero.</p> <p>Toggles between gross and net weight readings.</p> <p>Decreases setpoints.</p> <p>Press both keys simultaneously to toggle between kilogram and either pound, ounce or pound-ounce units.</p> <p>Turns the power on, and zeroes the display.</p> <p>Moves to the next setpoint.</p> <p>Turns the power off.</p> <p>Tares off the current weight.</p> <p>Increases setpoints.</p> <p>Press both keys simultaneously to toggle between kilogram and either pound, ounce or pound-ounce units.</p> |
|---|---|

II Description

Specifications

Weighing system: Strain-gauge load cell
Platform: 13.8" x 19.7" (350 x 500 mm), stainless steel
Weight display: Single face display
Type: 7 segment LCD
Character size, etc.: 0.5" (12 mm) (W) x 0.9" (23 mm) (H), 5 digits
Optional equipment: Batteries, AC adaptor, RS-232C communication board
Power supply: 9V DC - six "D" size batteries or AC adaptor (the scale is not washdown unless the AC jack is plugged with a water-tight seal).
Consumption: 0.12 W (max.)
Battery life: 600 hours of continuous use (when using alkaline batteries.)
Operating temperature: 23°F to 95°F (-5°C to 35°C)
Operating humidity: 25% to 85% RH
Waterproof classification: Complies with NEMA 4 (washdown) when the AC jack is plugged with a water-tight seal.

Capacities and divisions:

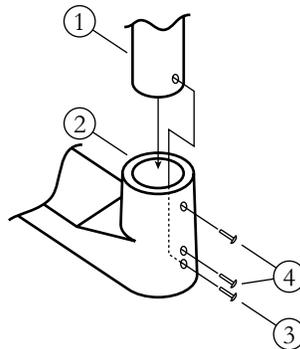
Kilogram	Pound	Ounce	Pound-Ounce*
30 kg x 0.01 kg	60 lb x 0.02	960 oz x 0.5 oz	60 lb x 0.5 oz
60 kg x 0.02 kg	150 lb x 0.05 lb	2400 oz x 1 oz	150 lb x 1 oz
150 kg x 0.05 kg	300 lb x 0.1 lb	4800 oz x 2 oz	300 lb x 2 oz

* Combined units, such as pound-ounce, are not legal-for-trade.

III Setup

Assembling the Scale

Seat the column (1) firmly in the column bracket (2). It may be necessary to loosen the stop (3) and locking (4) screws. Align the stop screw hole in the column with the stop screw and tighten. The stop screw must enter the stop screw hole for a secure column mount. Tighten the two locking screws.

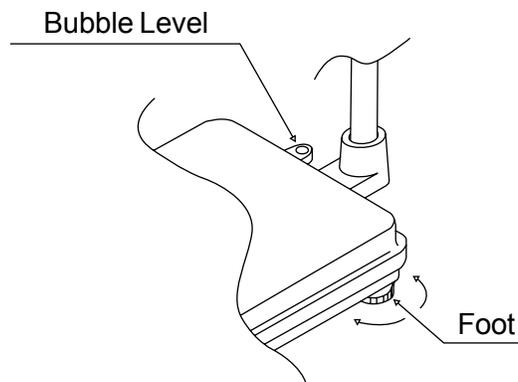


Adjusting the Indicator Angle

Loosen the indicator set screw, rotate the indicator right or left to the desired position and tighten the set screw. Press the angle adjustment button, tilt the indicator up or down to the desired position and release the button.

Leveling the Scale

Place the scale on a flat and level surface. There is a bubble level indicator next to the column bracket. The bubble should be in the center of the circle. Adjust the trim by turning the feet in or out to lower or raise the corner of the scale the foot is on. When the scale is level, tighten the lock nuts on each foot and recheck the level. If the scale is not level, the readings may not be accurate.



Installing Batteries or AC Adaptor

Open the indicator housing by pulling the release tab (located to the right on the back of the indicator) forward and swinging the front panel of the indicator housing forward and left. Install six "D" size alkaline batteries observing the polarity markings inside the battery case.

Use only the AC adaptor specified for use with the scale. Using the wrong adaptor can damage the scale. Insert the adaptor plug securely into the jack on the back of the indicator.

WARNING! The DP-6200 is not washdown unless the AC adaptor jack is plugged with a water-tight seal.

IV Directions for Use

Turning the Scale On and Off

Remove everything from the platform surface and press the  key. The display will briefly flash all segments of the LCD. After approximately 5 seconds, the display will stop flashing and automatically set to zero. Press the  key to turn the scale off.

Checking the Battery Level

Turn the scale on and push the  key while the display is flashing. The remaining battery life will be displayed. The more “o” that appear, the more life there is left in the batteries. After a few seconds, the scale will start normally.

Zero the Display

The scale will zero automatically when turned on. If a value is displayed when the platform is empty, push the  key to zero the display. The maximum zero range during power up is approximately $\pm 1.9\%$ of the scale capacity.

Switching Units

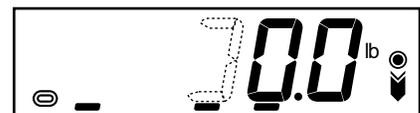
To switch between kilogram and either pound, ounce or pound-ounce units, press and hold the

 key and press the  key.

IV Directions for Use

Setting the Over/Under Indicator

- 1) Place the scale in normal weighing mode.
- 2) Press and hold the  key and push the  key (yellow tabs).
- 3) Press the  key to select the digit you want to change. The flashing underscore will advance to the right.
- 4) Press the up and down arrows to select the desired value.
- 5) Repeat steps 3 and 4 until all digits are set. All values below this setpoint will be indicated as under.
- 6) Press and hold the  key and push the  key (yellow tabs). This saves the lower limit and moves to the upper limit.
- 7) Press the  key to select the digit you want to change.
- 8) Press the up and down arrows to select the desired value.
- 9) Repeat steps 7 and 8 until all digits are set. All values above this setpoint will be indicated as over.
- 10) Press and hold the  key and push the  key (yellow tabs). This saves the upper limit and returns the scale to normal weighing mode.



To disable the Over/Under indicator, set both setpoints to zero.

V Weighing

Using the Over/Under Indicator

- 1) Begin with no load on the scale, the display reading zero, and the center of zero and stable indicators lit. The small up and down arrowheads on the right side of the display indicate that the over and under setpoints, respectively, have been set.
- 2) Place the item(s) to be weighed on the scale platform. If the item weighs less than the under setpoint, the large under arrow will appear.
- 3) If the item weighs from the lower setpoint to the upper setpoint, inclusive, the accept bullseye will appear.
- 4) If the item weighs more than the upper setpoint, the large over arrow will appear.



Gross Weighing

- 1) Begin with no load on the scale, the display reading zero, and the center of zero, stable and gross indicators lit.
- 2) Place the item(s) to weighed on the scale platform and wait for stable indication. The weight displayed will be the gross weight.



Net Weighing

- 1) Begin with no load on the scale, the display reading zero, and the center of zero, stable and gross indicators lit.
- 2) Place an empty container on the scale platform and press the  key. The weight of the container will be deducted automatically, the display will read zero and the net indicator will light.
- 3) Place the item(s) to be weighed in the container. The weight displayed will be the net weight.
CAUTION! The total gross weight should not exceed the capacity of the scale. This can damage the load cell.



V Weighing

Net Weighing (cont'd.)

- 4) To display the gross weight, press the  key. The gross indicator will light and the weight displayed will be the gross weight of the item(s) and the container. Press the  key again to return to the net weight.
- 5) To return to gross weighing mode, remove all items from the scale platform and press the  key.



Batching

- 1) Begin with no load on the scale, the display reading zero, and the center of zero, stable and gross indicators lit.
- 2) Place an empty container on the scale platform and press the  key. The weight of the container will be deducted automatically, the display will read zero and the net indicator will light.
- 3) Place the first item in the container until the desired weight is reached.
- 4) Press the  key and the display will return to zero. Place the next item in the container until the desired weight is reached.
- 5) Continue in this manner until all items to be batched have been weighed.
CAUTION! The total gross weight should not exceed the capacity of the scale. This can damage the load cell.
- 6) To return to gross weighing mode, remove all items from the scale platform and press the  key.



VI Troubleshooting and Error Messages

The scale can check various functions automatically. When a problem is detected, the following messages will be displayed. If you take the steps described below but the problem is not fixed, the scale needs to be calibrated or serviced by a qualified scale technician. Please contact your scale dealer.

The batteries are running low. When the batteries are running low, this indicator will come on. Replace all of the batteries with new ones.



The batteries are low. When the batteries are too low for accurate operation, this indication will be displayed and the scale may automatically power off. The batteries must be replaced to use the scale.



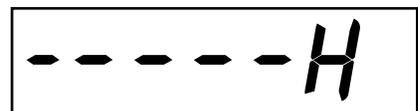
Weight out of range high. When the weighed value is 6 or more divisions heavier than the scale's capacity this message will be displayed. Remove the excess weight from the scale platform.



Weight out of range low. When the weighed value is a few divisions below calibrated zero, this message will be displayed. It is usually displayed when the platform is removed or has something wedged under it. Place the platform on the platform support or remove any objects wedged under the platform



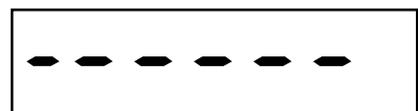
Initial error on startup, high. When the initial weight is heavier than the permissible zeroing range and the  key is pressed, this message will be displayed. Remove whatever is on the platform and press the  key again.



Initial error on startup, low. When the initial weight is lighter than the permissible zeroing range and the  key is pressed, this message will be displayed. It is usually displayed when the platform is removed or has something wedged under it. Place the platform on the platform support or remove any objects wedged under the platform, and press the  key again.



Weighing sensor error. When the weight detecting circuitry registers an error, this message will be displayed. Turn the power off and then on again.



VI Troubleshooting and Error Messages

Electronic circuitry error. When the operating circuitry registers an error, this message may be displayed. Turn the power off and then on again.



Electromagnetic disturbance error. This indication is occasionally displayed due to strong static electricity and/or electromagnetic disturbance. Move the scale away from any sources of electromagnetic radiation (motors, generators, power cables, transmitters, etc.) Turn the power off and then on again. If an AC adapter is being used, try using a different power circuit or AC adapter.

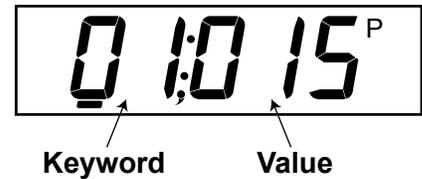


VII User Parameters

Setting the User Parameters

The scale keywords can be changed in the user setup mode to disable or change the duration of the auto-off function, to set which units (metric or standard) the scale defaults to when turned on, to set the RS-232C communications parameters and to set the display hold. The User Parameter Table lists the nine keywords, their function and their default values.

- 1) With the scale on, press the  and  keys to enter the user setup mode. The scale will indicate a keyword followed by a value.



- 2) To select the desired keyword, use the keys as follows:

-  - increase keyword by one
-  +  - decrease keyword by one



Note: See the User Parameter Table on the following page to locate the function to be changed and its standard value.

Example: To select standard or metric mode default on power up, press the  key nine times.

- 3) To change a parameter value, use the keys as follows:

-  - increase value by one
-  +  - increase value by ten
-  - decrease value by one
-  +  - decrease value by ten



Example: To select the metric mode as default on power up, press the  key to change the value from 000 to 001.

- 4) Press  to save changes and advance to the next keyword. Press  to exit the user setup mode.

VII User Parameters

User Parameter Table

Key Word	Std Value	Function	Description
01	015	Auto-off timer	000 Disables auto-off. 001~240 Number of minutes unused to activate auto-off.
02	000	Display hold timer	000 No display hold for changes less than four divisions. 001~030 Display hold duration, in seconds, for changes less than four divisions. 031 No display hold.
03	001	Communication	000 No serial interface. 001 Specified commands acceptable. 002 Sends zero detection. 003 Sends motion detection. 004 Sends continuously.
04	000	Communication data	000 Net weight (1 batch) 001 Net weight, tare weight, gross weight (1 batch) 002 Net weight, tare weight, gross weight (3 batches) 003 Display content (1 batch) 004 Serial printer format (1 batch)
05	000	Communication speed	000 9600 bps 001 600 bps 002 1200 bps 003 2400 bps 004 4800 bps 005 9600 bps 006 19200 bps 007 38400 bps
06	000	Character length	000 8 bits 001 7 bits
07	002	Parity	000 Non 001 Odd 002 Even
08	001	Stop bit length	000 1 bit 001 2 bits
09	001	Default mode	000 kg 001 lb/oz