Golfsmith®
THE ULTIMATE GOLF COMPANY

STOCK NO. 236817

Digital Swingweight Scale

Instruction Sheet

The Golfsmith Digital Swingweight Scale is designed for those demanding clubmakers who want speed and accuracy when swing weighting golf clubs. Beside these two essential features, the Classic Digital Swingweight Scale has built in functions that allow clubmakers to weigh golf club components, as well as partially assembled golf clubs to the nearest gram or 1/3 of a swingweight.

General guidelines & instructions

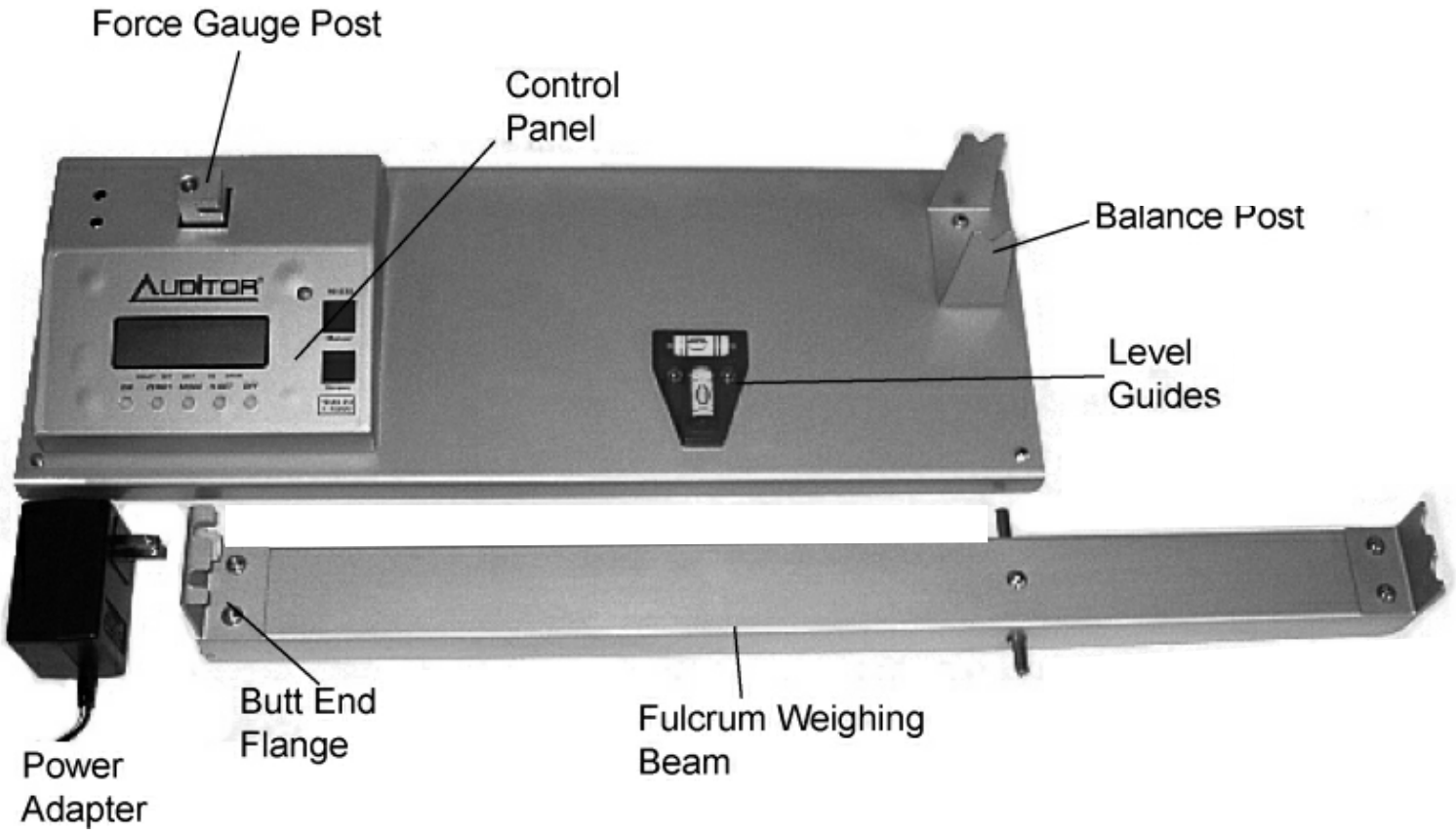
The Golfsmith Digital Swingweight Scale is a precision instrument that should give you years of trouble free operation providing that the following instructions are followed:

* Familiarize yourself with the scale parts prior to assembly and understand how the parts should be put together.
* Read and understand the instruction manual carefully.
* Familiarize yourself with the calibration setup procedures.
* Familiarize yourself with the modes of operation, weighing and swingweighting procedures.

Do not tamper with the scale, or take it apart. This will void the warranty. The scale has very specific settings and assembly procedures, and unless these procedures are followed the scale will not function properly.

WARNING! DO NOT OVERLOAD THE WEIGHING PAN, OR APPLY EXCESSIVE PRESSURE ON IT!

Golfsmith Digital Swingweight Scale



Scale Setup

Unpack Golfsmith's Digital Swingweight Scale and check that there are no parts missing or damaged. If parts are missing contact your service representative for assistance. The following parts should be included in the kit.

- Basic unit with control panel and display
- 500-gram Calibration weight
- 9 volt AC Plug
- A 14-inch fulcrum weighting beam.

Setup #1

1) Balance the base unit using the two levels. The base has four adjustable legs to assist in leveling the unit.

2) Angle the fulcrum weighting beam so that the butt end flange sets into the slot on the force gauge post. Once in place, set the beam posts into the "V" of the balance post.

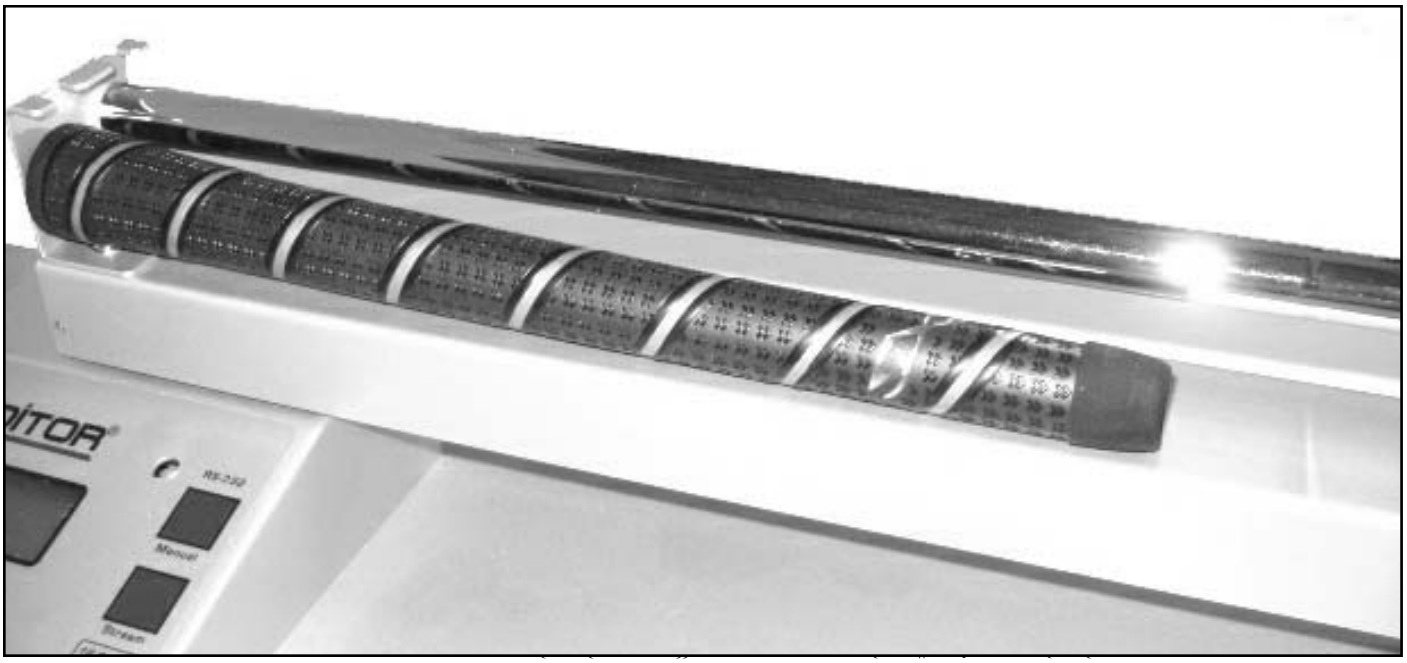
3) Plug in the AC adapter plug to supply power to the electronics.

4) Turn on the scale. When the start up procedure is complete the scale will read "0" and the ready indicator will light up.

5) To make sure that the scale is properly setup place the calibration test weight on top of the weighting pod. The display should read 500 grams ±1gram.

Golfsmith Digital Swingweight Scale

Checking the swingweight of a golf club
Place the golf club in the weighting beam as you would with a conventional swingweight scale with the grip cap under the grip back stop and the shaft resting in the cradle. Press the “Mode” key until swingweight is displayed. A black arrow will slowly flash on and off on the control panel once toggled to the correct position. Please be careful not to ram the golf club against the grip backstop as this may damage the load cell assembly.

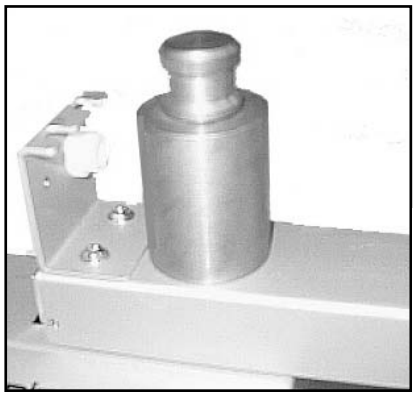


Checking the swingweight of a grip-less golf club:
Lay a golf grip against the grip backstop and on top of the swing weighing pan. Place a grip-less golf club in the weighing beam as you would on a conventional swingweight scale (The golf grip may be held in position with a strip of tape).

Important tip
When checking the swingweight of a grip-less golf club, clubmakers must pay attention to the grip cap thickness which can very between 1/8" ~1⁄4" This will invariably influence swingweight readings. In order to account for such a situation: Leave a 1/8" to 1/4" gap between the butt of the raw shaft and the grip back stop.

Please note: When checking the swingweight of a grip-less golf club you shoud not reset the scale by pressing on the zero key. This will automatically engage the tare function of the weighing pan.

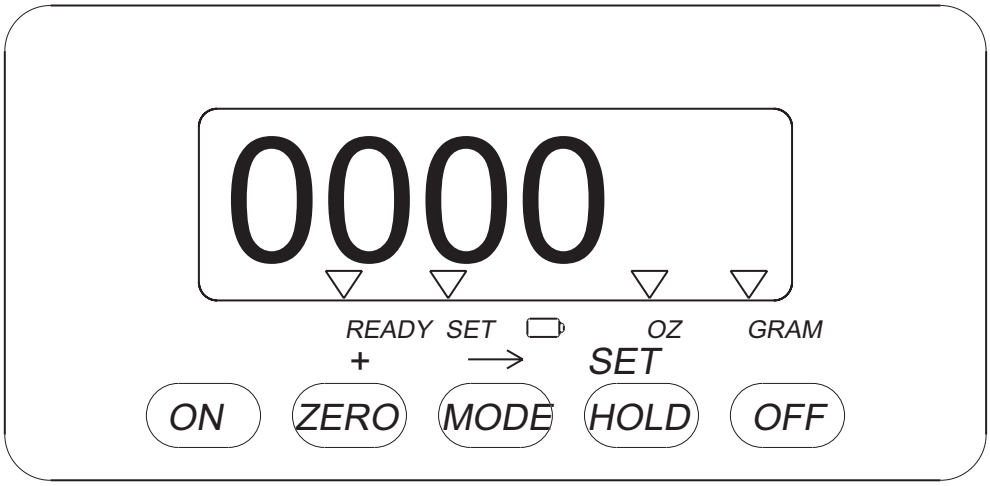
Classic Digital Swingweight Scale



Weighing golf club components:
To weigh the golf club components simply rest the parts to be weighed on top of the weighing pod. Please note: The scale will need to be reset to “0“ between weighing. To reset the scale just press on the ZERO key.

Weighting a golf club
To measure the static weight of a golf club set it on the weighting beam the same as you would to measure swingweight. Press the “Mode” key to toggle between read-out functions, including total grams and total ounces. A black arrow on the display will point toward the appropriate reference title on the control panel.

Please note:
The scale will need to be reset to “0” bewteen weighting. To rest the scale just press the “0” key.



On Turns the scale On

ZERO Resets the display reading to 0.

MODE This function is used to toggle back and forth between ounces and grams

HOLD Locks the last reading on the LCD, even when no part is weighed . This function is useful for recording data between weighing. Pressing on the function key again will clear the display for the next reading.

OFF Turns the scale off.

READY Status indicator. The icon indicator appears on the LCD whenever the scale is ready to weigh parts.

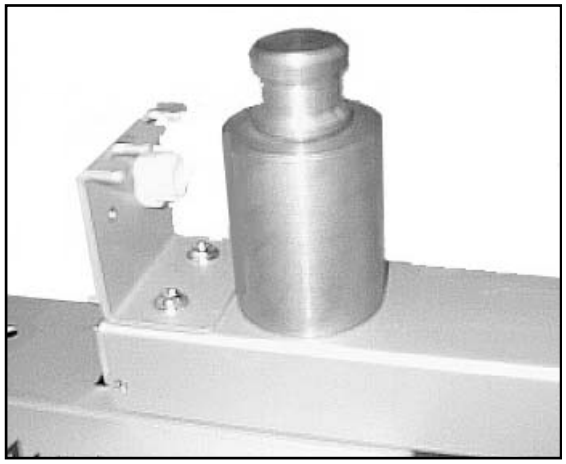
H - **SET** The icon will appear only when the calibration mode is engaged. Press the function key to accept parameters.

Battery The battery icon will appear on the LCD at startup or when the battery needs replacing.

OZ OZ is short for ounces. The indicator will appear on the LCD whenever the ounce mode is selected.

Gram The indicator appears on the LCD when the gram mode is selected. This is the default weighing unit.

Arrow When in calibration mode; Press on the function key to toggle between digits on the LCD from left to right.



Calibration note:
When calibrating the scale follow the outlined procedures in the trouble shooting guide.
It is imperative that when calibrating the scale that the calibration weight be placed on the weighing pod as illustrated.

Scale Operation

STEP 1 - SWITCH ON THE SCALE
Press and release the ON button on the front panels. Immediately you will see the display begin to cycle through its start up procedures. The display will first show 00000, followed by 1000, after which the scale will light up each of the icons on the display and successively display 88888 as a function of testing each part of the LCD.

During start up, the battery icon will flash. This is a normal part of start up routine of the scale and does not indicate the battery is low. When the start up procedure is complete, the scale will display a 4-digit number between 3000~ 6000. This number will not be the same every time the scale is switched on, but it should always be in the range indicated. When the start up routine is complete, the scale will read 0 with the triangular icons displaying over the READY and the GRAM weighing mode.

STEP 2 - SET THE SCALE FOR GRAM OR OUNCE WEIGHING
The default function of the scale is set to automatically read in grams, as indicated by the arrow over the GRAM position on the display panel. When the swingweight module is in the default gram mode, only the golf club moments is displayed.
To check the swingweight of a golf club in the usual lorythmic format (A,B,C,D) etc.. Press on the "Mode " button to toggle back and forth between grams & swing weights.

STEP 3 - SWINGWEIGHTING GOLF CLUBS
Swingweighing a golf club: Place the golf club in the weighing beam as you would with a conventional swingweight scale with the grip cap under the grip back stop and the shaft rested in the cradle. Press the "Mode" key to toggle between swingweights readings and moments reading.
Please be careful not to force the golf club too hard against the grip backstop as this may damage the load cell assembly.

Swingweighing a grip-less golf club: Lay a golf grip against the grip backstop and on top of the swing weighing pan. Place a grip-less golf club in the weighing beam as you would on a conventional swing weight scale. (The golf grip may be held in position with a strip of tape)

Important tip
When swing weighing grip-less golf clubs. Golf club makers must pay attention to the grip cap thickness which can very between 1/8" ~1/4" This will invariably influence swing weight readings. To account for this leave a 1/8" to 1/4" gap between the butt of the raw shaft and the grip back stop.

STEP 4 - WEIGHING COMPONENTS
Weight auditor: Balance components on top of the weighing pod. Immediately the scale will begin to record the mass of the part. The arrow over the READY position comes back on when the weight of the part has been determined.

If you wish to know the weight of the part in both grams and ounces, it is OK to toggle back and forth between the two modes of weighing simply by pressing and releasing the MODE button. It is normal for the scale to flash back and forth between two different weights due to the sensitivity of the scale. To weigh parts quickly we do recommend you operate the scale in an area that is away from vibrations or airflow. The scale is so sensitive that air blowing from a fan will cause the scale to change.

If you wish to freeze the weight of the part on the LCD, such as if you want to remove the part from the scale but wish to retain a memory of the weight, press and release the HOLD button. You can then remove the part from the scale and the display will continue to record the weight. To return the scale back to the 0 to weigh another part, simply press and release the HOLD button again. Pressing ZERO when the HOLD button is activated will do nothing.

TROUBLESHOOTING

The Golfsmith Electronic Scale has been designed to be as accurate and trouble free as possible. Should you have any problems with the performance and function of the scale, first refer to this guide. If you still are having problems, call our Customer Service Department toll free at 1-800-925-7709 for assistance.
If you accidentally engage the calibration mode, such that any number may come on the display and stay on the display, simply switch the power OFF and then ON again and the scale will be restored to its default settings. Do NOT press the HOLD button with such an accidentally activated calibration number staying on the display or the scale will lose its calibration, thus requiring you to initiate the full re-calibration procedures which will be listed in this section.

NOTICE

Your scale has a built in resolution of +/-1 gram or 0.3 swing weight. The scale has a built in logic that will r**ound up gram weight and swing weight to the nearest gram either up or down. Thus a weight reading may show 499 grams instead of 500 grams or could show 501 grams instead of 500 grams. This is perfectly normal and shouldn't be interpreted as a lack of accuracy or poor calibration.**

The same applies to swing weight. The scale will round up swing weight to the nearest 1/3 of a swing weight either up or down. There are instances where by swing weight for the same golf club will vary by as much as 0.6 SW or is not repeatable. This is due to the golf club not being properly positioned under the grip back stop. Please double check your setup prior to initiating a full calibration procedure.

The first procedure to use when any type of irregular performance of the scale is encountered is to switch the scale off, wait a few seconds and switch it on again. Because the scale cycles through an auto-calibration procedure every time the scale is turned on, this can reset the scale to all of its auto default settings and will usually solve the problem.

If and when the LCD freezes and the OFF button is disabled, disconnect the battery and reconnect it again. Then turn the scale back on.

WEIGHING INACCURACY

Checking Auto Calibration of the Scale
If you suspect the scale is not weighing accurately, it is possible to put the scale through a more extensive re-calibration procedure. Before initiating the full re-calibration procedures, it is always best to perform a calibration check by following these procedures:

Step 1 -Turn the scale on and note if the 1000 reading appears on the display immediately after the 0000 reading is seen. Note whatever that reading may be if it is not 1000.

Step 2 -Be sure the scale is in a level position and nothing is on top of the parts weighing platform. When the scale is in the READY mode, press and hold down the ZERO button for 2-3 seconds. The auto calibration setting will come up on the display. This setting should be between 3000 and 6000. If the settings are within the range indicated there is no need to recalibrate the scale. If you suspect that the scale is not functioning as it should:

1) The scale was probably stored improperly for long periods of time. Leave the scale on a flat surface and at room temperature for an hour or so before using it again.
2) The weighing beam is jammed. Free the beam and readjust the pivot pin.

Initiating Manual Re-Calibration of the Scale

If you still suspect the scale is weighing inaccurately, the scale will need to be re-calibrated.

Step 1 -Turn the scale on and note if the 1000 reading appears on the display immediately after the 0000 reading is seen. Note whatever that reading may be if it is not 1000.

Step 2 -Be sure the scale is in a level position and nothing is on top of the parts weighing platform. When the scale is in the READY mode, press and hold down the ZERO button for 2-3 seconds.
The auto calibration setting will come up on the display. This setting should be between 3000 and 6000. In the event that the auto calibration setting is greater or less than the 3000-6000 acceptable range, access the VR adjustment screw through the small access hole at the back of the scale with a small Phillips head screwdriver. When adjusting the VR screw, locate the screwdriver properly and rotate the screw very slowly and without pushing. The value on the LED will increase when turned clockwise and will decrease when turned counter clockwise.

DO NOT PRESS INTO THE SCREW OR ROTATE THE VR SCREW MORE THAN 1 FULL TURN.

Once the setting has returned to within the 3000-6000 range, press and release the ZERO button. Turn the scale to OFF. Upon turning the scale back on the unit should display a calibration set-ting within the 3000-6000 range, indicating that the scale did not suffer any permanent damage.

Step 3-Turn the scale to OFF. Press and hold the HOLD key down. Press and hold the ON button down while still holding the HOLD button down. While pressing and holding both buttons, wait 5-7 seconds until the number 1 appears on the display. Release both buttons after the number 1 appears. Do NOT let up either button until the number 1 appears on the LED.

Step 4 -Press and release the ZERO key. The number 2 will appear.
Step 5 -Press and release the HOLD key. The number 3 will appear.
Step 6 -Press and release the ZERO key again. The display will now read123.
Step 7 -Press and release the OFF button to turn the scale off.

Step 8- - Repeat step 1. The display will immediately begin a countdown from 99000 to 00000. As soon as the display begins its count-down, release the HOLD and the ON buttons. When the count-down has stopped, the display will read 00500. The first 0 will be flashing on the display. Turn the scale off. If the display reads a number other than 00500, use the ZERO(+) key to change the numbers on the display. Use the MODE(-) button to move one digit to the right each time the button is pressed.

Step 9 -After the display reads 00500, place the 500g standard calibration weight in the center of the weighing pod. Then press and release the HOLD key. The display will go blank intermittently for a few seconds and 00500 will come back up on the display. Press and release the HOLD button one more time to accept the calibration display of 00500. Turn the power OFF. The scale has now been re-calibrated and should function normally after the scale is switched ON. DO NOT REMOVE THE CALIBRATION WEIGHT FROM THE WEIGHING POD UNTIL THE 00500 READING IS DISPLAYED, AND THE POWER IS TURNED OFF.

If the 00500 calibration value is not displayed correctly, remove the 500g weight, replace it in the center of the weighing beam, and press and release the HOLD button again. The display will go blank intermittently for a few seconds and 00500 should come back up on the display. If it does, press and release the HOLD button one more time to accept the calibration display of 00500. Turn the power OFF. The scale is now re-calibrated and should function normally after the scale is switched ON.

General Recommendations and Guidelines

Before initiating the calibration procedures, be sure you have a 500g calibration weight at hand. It is not possible to complete the re-calibration of the scale without one. When using the 500g calibration weight during the manual re-calibration procedures, ALWAYS place the weight on top of the weighing pod

1. Do NOT store the scale near a direct source of heat.
2. Do NOT pick up the scale by grabbing the weighing beam.
3. Do NOT place very heavy objects on the scale for more than a few seconds at a time. The scale capacity is 1000 g /35.0 Oz and should not be exceeded. **Should the display read "----" you have exceeded the capacity of the scale and you must remove the object from the weighing platform IMMEDIATELY.**