Operating Instructions
SwingW.com
Pro-Touch Steel
Digital Swingweight Scale



Introduction:

The Pro-Touch Steel Electronic Swingweight scale is fully electronic and has no moving parts to create mechanical errors. Because it is fully electronic and calibrated, it should be treated a bit more like a precision instrument. Keep and use the unit in a conditioned space. All electronics are susceptible to harsh environments and this product is no different.

Our approach to measuring swing weight of a golf club is unique and part of our pending patent. Accurately measuring the weight of the club at 2 predefined points allows us to calculate total weight, balance point, inch/grams of torque and ultimately the club's swingweight. This method is faster, more accurate and more repeatable than any other swingweight system.

If you are comparing Pro-Touch readings vs mechanical scale readings, you should assume the Pro Touch readings are accurate. Many mechanical scales have built in errors and many do not read accurately (and never have). Our method is friction free and mathematically precise. The following instructions will help you get the most from your Pro-Touch Steel.

Contents:

- 1. One main scale unit
- 2. One MicroUSB power supply
- 3. One shaft support end and 2 grip support ends.
- 4. Two screws to attach the above supports to the load cells.

How to use:

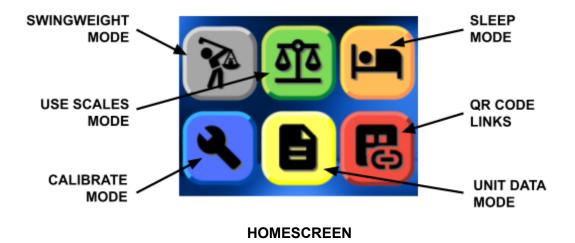
1. To reduce potential shipping damage, the grip and shaft supports are shipped un-installed. Install the shaft support on either end of the scale. <u>The scale automatically detects which end the supports are on</u>. This also allows the user to configure the scale so the clubhead can point right or left depending on your needs. Use the provided screws to attach the supports. <u>DO NOT OVERTIGHTEN</u>. Snug tight is just fine. The load cells can be mechanically overloaded, so only use a hand phillips screwdriver (no power tools).







- 2. Choose which grip support you want to use and install it on the opposite load cell. The grip support with the pin is for any grip with a hole in the end, oversized grips and/or "fat" putter grips.
- 3. The grip support with the platform is designed to allow measurement of clubs with normal sized grips, clubs without grips and the platform allows you to measure other objects up to 1 kg.
- 4. Set the scale on a level surface such as a countertop or workbench. The scale does not need to be leveled if the surface is reasonably level.
- 5. Plug the power supply into a 120v receptacle.
- 6. Plug the microUSB cord from the power supply into the USB receptacle on the left end of the scale cabinet.
- 7. After a brief startup and calibration mode, the unit will display the "HOMESCREEN". From there, you can navigate to the desired mode.
- 8. When touching the screen, it takes slightly more pressure than a typical smartphone. It can also be touched with a stylus or pencil eraser. That's handy if you have large fingers or epoxy on them.



SWINGWEIGHT Mode:

NOTE:

Only use the scale to take measurements. If you are making adjustments to the club, remove it from the scale first. The load cells are not overly delicate, but they can't withstand 150% overload without permanent damage. During a reading, it is normal to see the weights bounce around a few grams. We are measuring down to the 1/10 of a swingweight and to .1 gram of total weight. If in doubt, remove the club, "TARE" the scale and re-measure the club.



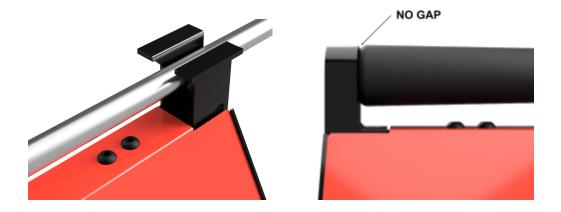
1. When you start the swingweight mode, <u>YOU SHOULD NOT HAVE THE CLUB ON THE SCALE</u>. You will see one of the following icons in the bottom right corner of the screen.



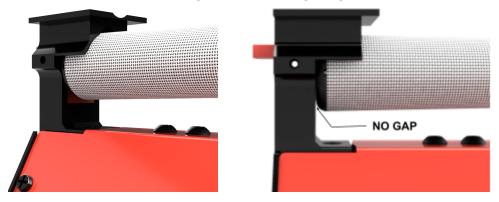




- 2. If you press any "CHECK" icon (GREEN, YELLOW OR RED) the scale will enter TARE mode.
- 3. A GREEN check means the combined reading of the two load cells are within 1 gram from zero and you are ready to measure the club swingweight.
- 4. A YELLOW check means the combined reading of the two load cells are between 1 and 2 grams from zero. You should TARE the scale for a more accurate reading.
- 5. A RED check means the combined reading of the two load cells are more than 2 grams from zero. You should TARE the scale for a more accurate reading. If left in the RED check state, the scale will automatically enter a TARE cycle.
- 6. When you see a large "TARE MODE" on the display, the scale is in TARE mode. You should not move the scale or touch the scale ends while this is in process.
- 7. It is normal to see the GREEN check turn RED while you are loading the club for measurement.
- 8. Insert the club in the fixture. If you are using the "pin" style grip support, the pin on the grip support is meant to fit in the hole of the end of the grip. The grip cap <u>MUST</u> be tight against the support vertical face. The shaft sets in the shaft support on the opposite side of the scale.



9. If you are using the grip support with the platform, the grip cap is supported by the "v" shaped hood on the support. The grip <u>MUST</u> be tight against the support vertical face.



10. Once you load the club, the swingweight and other club data will be displayed automatically. The dial has a blue bar graph which will slide left to right to simulate an analog swingweight reading. Each tick mark is 1/10th of a swingweight. This will help you fine tune to a desired swingweight.



11. The "HOME" icon will return you to the homescreen at any time.



12. The "PAUSE" icon allows you to pause the screen during a swingweight reading. When you are in "pause" mode, the icon will change to a green "PLAY" icon. Press the play icon to return to live readings. If your readings aren't changing, make sure you're not on "pause".





13. The "CHECKMARK" icon will change to a "QR CODE" icon during a swingweight measurement. See paragraph 16 below for detailed information about the QR mode.



14. To set the fixture to "gripless" measurements, press the lever on the butt support to rotate the gripless adapter into position. See the illustration below. The gripless adapter allows the shaft to remain centered and has a 1/8" thick step to simulate the thickness of the grip cap.



15. You can temporarily rest a grip on the support platform and club shaft to approximate the total club weight. SWINGWEIGHT WILL NOT BE ACCURATE WITHOUT THE GRIP IN PLACE. This is for estimation only. Final assembled swingweight must still be checked.



- 16. While the club is being measured, if you press the QR icon, a "CLUB TYPE" screen will appear. This screen will allow you to designate the club type (i.e. DRIVER, WOOD, IRON etc...). Press enter to go to the "CLUB NUM / LOFT" screen.
- 17. The "CLUB NUM / LOFT" screen allows you to enter the club loft/or number up to 4 numerical digits (i.e: 7, 10.5, 60, 425, etc...) We limit the user input to 4 digits to keep the

QR code generator from overloading with data and to keep the keys large enough to use with a finger.



- 18. If you choose not to enter the club type or loft, simply press enter and the QR screen will display without the club type information. The club description has no impact on the swingweight readings. It is only used to identify the club for the user once the QR code has been generated.
- 19. Use your smartphone's QR scanner app or any other scanner to save / share the current club measurements. The information will be saved exactly as shown right of the QR code. From your QR app, you can save, email, text and otherwise share the club's measurement data. Touch anywhere on the screen to return to the measurement screen.

Note: the longer you leave the club in the scale, you may experience a few grams of drift on the readings. That is normal with all load cells. If in doubt, remove the club, TARE the scale and take a new reading.

USE SCALES Mode:

- 1. Entering the USE SCALES mode will allow you to see the readings of each load cell in real time. The TOTAL GRAMS reading gives you the sum of both load cells.
- 2. You can also use the USE SCALES mode to weigh individual club components just like you would on a normal digital scale.





- 3. You can add a known weight to either weight holder to CHECK the load cells. At any time, if you press the SCALE icon in the lower right corner, both load cells will enter a TARE MODE.
- 4. If you don't have a known weight (calibration weight), use any object that weighs around 500 grams. Weigh the object on both scale ends and TARE in between readings. Any object should weigh the same (within 1 gram) on both scale ends.
- 5. <u>DO NOT EXCEED 1000 GRAMS (2.2 LBS)</u> on either load cell. The "TOTAL GRAMS" reading is the combined weight (or negative weight) of both load cells.

SLEEP Mode:

Entering the SLEEP mode shuts off most of the scale's functions. The scale is not truly "off", but all components go into standby mode. When you are not going to use the scale for the rest of the day, it is always best to unplug the power supply cord. The scale will automatically go into SLEEP mode if it senses it is not in use for about 10 minutes. To return from SLEEP, touch the screen anywhere. The scale will automatically return to the homescreen.

CALIBRATION Mode:

The scale does not require any sort of regular calibration. However, we didn't want to release the scale without the ability for the user to calibrate should they feel the need in the future. Once you enter the CALIBRATION mode, you'll see the following screen. You <u>MUST</u> use a 500 gram calibration weight (available on Amazon or Ebay) to perform this calibration.





- 1. Choose CALIBRATE LEFT (OR RIGHT). The scale will TARE automatically.
- 2. Next the display will prompt you to add the 500 gram weight to the weight holder and to touch the screen. A 5 step calibration will start. DO NOT MOVE THE SCALE OR WEIGHT WHILE THIS IS IN PROCESS.
- 3. A new calibration factor will be determined. At any time during this process, you can press cancel and you will exit the calibration.

- 4. To save the new calibration and start using it, touch the screen for the final time. After you touch the screen this final time, the scale will store this new calibration factor and send you into the USE SCALES mode to verify your new calibration.
- 5. <u>Until you cancel this custom calibration, the scale will ignore factory calibration</u> and use your custom calibration. When the scale powers up, you'll see a message that you are using custom calibration settings.
- 6. To restore factory default calibration, enter mode "RESET LEFT (OR RIGHT)".

UNIT INFO Mode:

Entering the UNIT INFO mode will display information about the manufacturing date and calibration factors. It will also show any custom calibration factors that the user may have implemented. The ARM distance is the factory programmed distance between the left and right club support points. This is non adjustable in the program and any repair of the scale MUST always return this measurement to what is programmed into the scale.

QR LINKS Mode:

If you press the "link" icon in the homescreen, a single screen with QR codes will be displayed. THESE ARE LINKS ONLY to be used with your smartphone scanner. These links will take you to videos, instructions and SwingW.com. Touch the screen to return to the "HOME" screen.

Conclusion:

We hope you enjoy the use of your new Pro-Touch Steel Digital Swingweight Scale. We took input from customers who are using our original digital scales and incorporated as many refinements as possible into this latest version. The actual measurement method works the same as previous versions, but we've made it a bit more user friendly and rugged.

The components are assembled in a way that they can be disassembled, but we caution you against it. The spacing between the 2 measurement points is critical. All swingweight calculations revolve around that spacing being as it was when it left our shop. We test and calibrate each unit and check both load cells to make sure they read as linearly as possible. It's best to keep it that way.

Thanks again for your purchase. Hit'em straight!!