

# Operating Instructions

## SwingW.com

### Pro-Touch 5

### Digital Swingweight Scale



## Introduction:

The Pro-Touch 5 digital 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 the swingweight of a golf club is unique. 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 5.

## Contents:

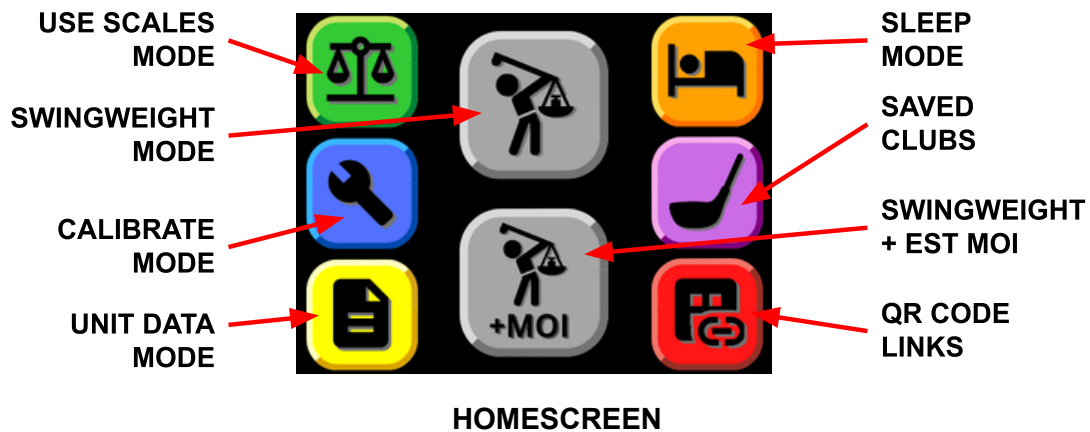
1. One main scale unit
2. One MicroUSB or USB-C power supply
3. One shaft support end and 2 grip support ends.
4. Two screws to attach the above supports to the load cells.

## 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. *The scale automatically detects which end the supports are on.* 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. ***DO NOT OVERTIGHTEN.*** 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-cap, oversized grips and/or oversized 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. Plug the USB cord from the power supply into the USB receptacle on the left end of the scale. If you ever have an issue where the scale screen does not turn on, try a different USB cable and/or power block (any cell phone charger block will work).
6. After a brief startup and load cell calibration mode, the unit will display the "HOMESCREEN". From there, you can navigate to the desired modes.
7. 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 for measurements. If you need to make adjustments to the club (adding lead tape, changing grips, etc.), remove it from the scale first. While the load cells are robust for normal use, they cannot withstand overloads exceeding 150% of capacity without permanent damage. Always handle clubs gently when placing or removing them from the scale.*

*About Reading Fluctuations: During measurement, it's normal to see values fluctuate by a few grams. The scale measures with high precision - down to 1/10 of a swingweight point and 0.1 gram of total weight. Minor variations are expected as the electronics stabilize.*

*If readings seem unstable: Remove the club, press "TARE" to zero the scale, and re-measure.*



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

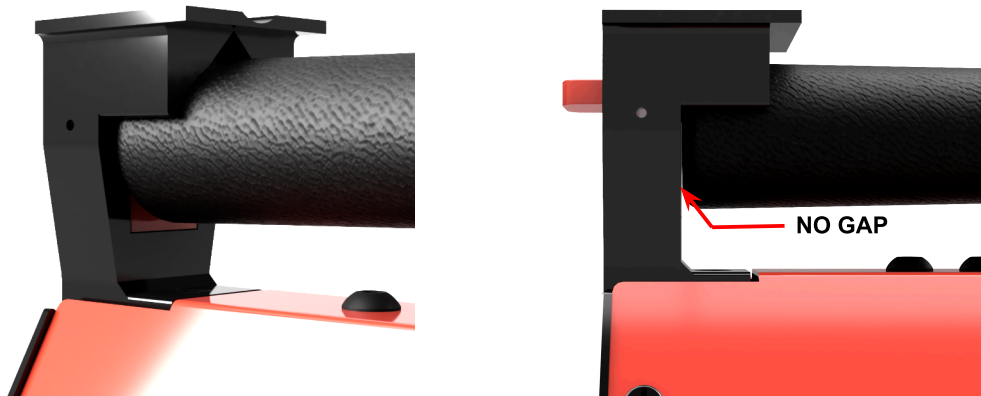


2. If you press any "CHECK" icon (GREEN, YELLOW OR RED) the scale will enter "TARE MODE". Both load cells will be returned to zero grams.
3. A GREEN check means the combined reading of the two load cells are within 1 gram from zero and you are ready to measure the club swingweight.
4. A YELLOW check 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 after a short delay.
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 ***MUST*** be tight against the support vertical face. The shaft sets in the shaft support on the opposite side of the scale. Use the same method to load the club for the best repeatability in readings.



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 ***MUST*** 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 two graphs (swingweight letters and numbers) which simulate an analog swingweight reading. This will help you fine tune to a desired swingweight.



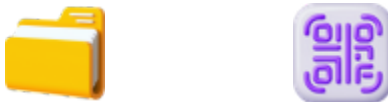
11. The “HOME” icon will return you to the homescreen at any time.



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”. This function is handy if you want to take a picture of your readings.



13. The “FILE” icon will allow you to save the club swingweight measurements. See “SAVE CLUB” section below for detailed information about this mode.



14. The “CHECKMARK” icon will change to a “QR CODE” icon during a swingweight measurement. See “QR CODE” section below for information about the QR mode.

15. 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  $\frac{1}{8}$ ” thick step to simulate the thickness of the grip cap.

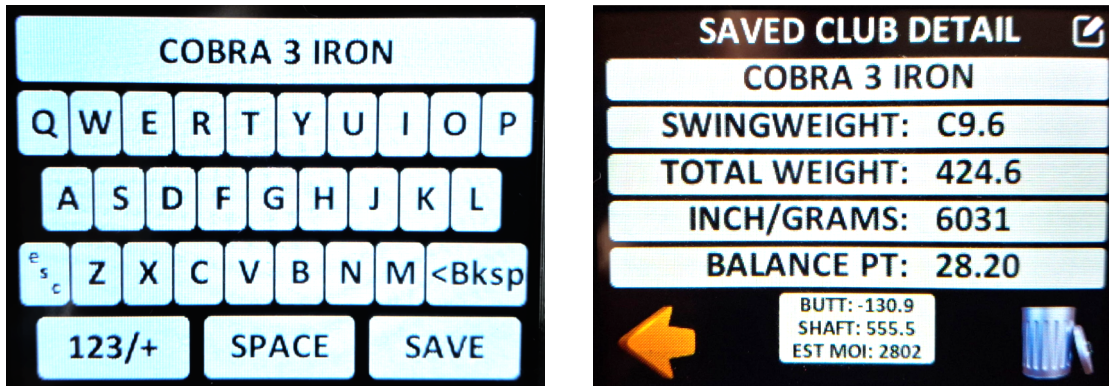


16. You can temporarily rest a grip on the support platform and club shaft to approximate the total club weight. **SWINGWEIGHT WILL NOT BE ACCURATE WITHOUT THE GRIP IN PLACE.** This is for estimation only. The final assembled swingweight must still be checked.



## SAVE CLUB Mode:

1. While the club is being measured, if you press the FILE icon, a KEYPAD screen will appear. This screen will allow you to type in a club description (up to 30 letters/numbers). The keypad is best pressed with a stylus as the buttons are small. The “esc” key returns you to swingweight mode without saving the club.



2. Once you are done entering the club description, press “SAVE”. The club data will be stored in flash memory and you will return to the swingweight screen in progress. Up to 50 clubs can be saved. Clubs are indexed in memory to always show the most recent saved club first and the rest in the order they were saved. The “FILE” icon has the number of saved clubs ie: “7/50” means 7 clubs out of 50 have been saved. Clubs are saved in flash memory and will be available when you power up the scale.
3. To view the saved clubs, go to the HOME SCREEN and press the SAVED CLUBS icon. Save clubs will be listed up to 5 per page. When you press the club description, the club details will be displayed. If you want to know what date the club was measured, make sure you add that when entering the club description . Saved club names ONLY can be edited by pressing the edit icon on the “SAVED CLUB DETAIL” page. Clubs can be individually deleted by pressing the TRASH icon in the detail page. You can also delete ALL saved clubs in the main SAVED CLUBS page by again pressing the TRASH icon. If you have the optional thermal printer, the club detail can be printed.

## QR CODE Mode:

1. While the club is being measured, if you press the QR icon, the keypad screen will be displayed. Just like the “Save Club” feature above, you can enter a club description which will be included in the QR code.
2. 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.



3. 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.

## SWINGWEIGHT +MOI Mode:

Moment of Inertia (MOI) is an advanced method for matching clubs based on their resistance to rotation during the swing. Traditionally, measuring MOI requires expensive dynamic testing equipment or error prone manual pendulum measurements.

Our proprietary two-position measurement system provides accurate MOI estimates in seconds using your existing Pro-Touch 5 scale. The process is simple:

1. First measurement - captures club weight and balance point
2. Flip the club 180° - repositions head where grip was
3. Second measurement - analyzes mass distribution pattern

By comparing readings from both positions, our scientifically-developed algorithm calculates MOI based on how the club's mass is distributed along its length.

Accuracy: Testing shows typical accuracy of  $\pm 50 \text{ kg-cm}^2$  (approximately 2% error) compared to dynamic testing, at a fraction of the cost and complexity.

## ESTIMATED MOI MEASUREMENT PROCEDURE:

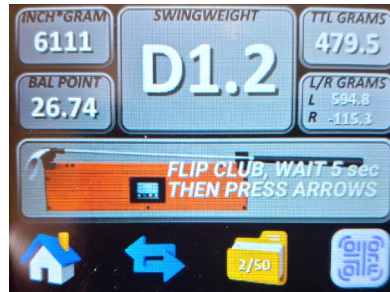
**STEP 1: Initial Swingweight Measurement.**

1. Follow the standard swingweight measurement procedure discussed above.



2. Take the initial swingweight reading.
3. While the swingweight reading is stable, press the blue “flip” arrows.

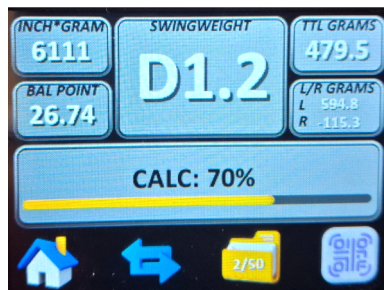
**STEP 2: Flip the club 180°**



4. Flip the club over as shown below. The head of the club should be as near to support as possible (see image below). The shaft should rest in the v-groove of the shaft support.



5. Once readings are stable, press the blue “flip” arrows again. If the total grams are equal to the original swingweight measurement, the scale will begin the estimated MOI calculation. Results will be displayed as shown below. Most clubs should have a MOI reading between 2500 and 3500 kg-cm<sup>2</sup>. Readings can be saved, viewed as a QR code or printed (if you are using a thermal printer).



**IMPORTANT NOTES:**

- Use consistent club positioning for both measurements (same support style, same care)
- The flip button will not activate until readings stabilize - this ensures accuracy
- If weight mismatch exceeds 1 gram, remove club and restart measurement
- For best results, handle club gently and avoid bumping the scale

## 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. **DO NOT EXCEED 1000 GRAMS (2.2 LBS)** on either load cell. **YOU MUST USE A 500g WEIGHT DURING CALIBRATION MODE.**

## 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 using 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 **MUST** 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 “home” 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 that your new calibration is working.
5. Until you cancel this custom calibration, the scale will ignore factory calibration 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)**”.

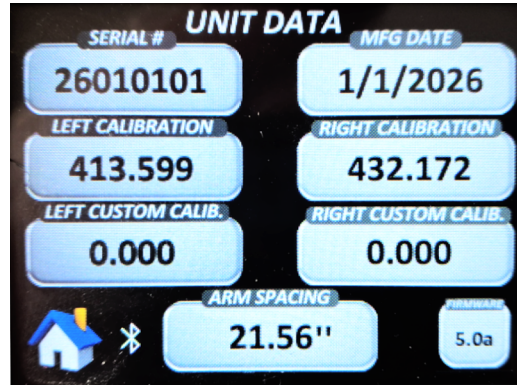
## QR LINKS Mode:

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](http://SwingW.com). Touch the screen to return to the “HOME” screen.

## UNIT INFO Mode and Firmware Update:

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. The **ARM** is non adjustable in the program and any repair of the scale **MUST** always return this measurement to what is programmed into the scale.

There is also a small bluetooth icon on this page. If you press the icon, bluetooth can be turned off and on if desired. Default is OFF, and the last selection is stored and will be default at next start-up. Bluetooth is only needed when using a thermal printer.



The unit info page also shows which firmware is loaded on the scale. If you press the firmware window, it will display a page which gives more information about updating firmware. The update tool can be found here: <https://swingwcom.github.io/USB-Flasher/>

**ONLY UPDATE USING THE PROPER \*.bin files from SwingW.com to update your firmware. We keep our firmware backward compatible. If you (or a friend) have an older scale, it can be updated to the latest firmware.**

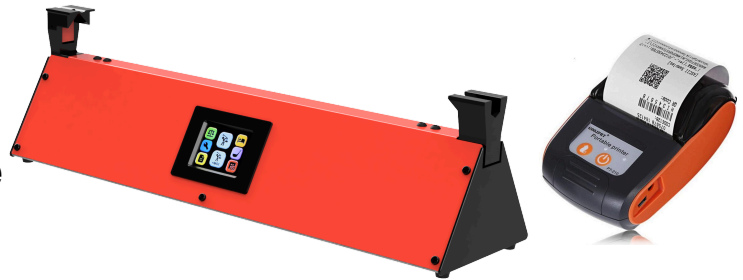
## Conclusion:

We hope you enjoy the use of your new Pro-Touch 5 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.

Sorry for the length of this manual. We've tried very hard to explain how to get the most out of your scale.

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 !!

# Supplemental Operating Instructions for Pro-Touch 5 Digital Swingweight Scale With Thermal Printer



## Introduction:

The Pro-Touch Digital Swingweight scale comes with built-in Bluetooth LE (non-broadcasting). We have included “beta” support to allow you to print out some of the screen results with a low cost BLE thermal printer. The Pro Touch 5 has been tested with the GOOJPRT PT-210 printer. Printers labeled “MTP-2” or “MTP-II” should work also, but they have *NOT* been tested. You can find these printers on Amazon and Ebay for \$25 to \$40. We suggest you order extra rolls of 58mm thermal printing paper too. This feature is free to use, but may become non-functional if the printer’s firmware changes.

## How to Use:

Make sure the scale’s Bluetooth is turned on by pressing the Bluetooth icon on the “unit Data” screen. The printer will print out several screens: It will give swingweight results from the swingweight screen. It will also print the *UNIT DATA*, *SAVED CLUB DETAIL*, *USE SCALES* and the *QR CODE* link pages. Whenever the scale turns on, it automatically starts scanning for the PT-210 printer. If the bluetoothLE connection is made, the green light on the printer will turn blue and the Pro-Touch 5 will show the printer icon on the appropriate screens. Once you press the “PRINTER” icon, the screen data will be sent to the printer and it will print out.



The printer is battery powered and DOES NOT plug into the Pro-Touch 5. See below for typical print out results. Free to use, but NO warranty on this functionality.

### SwingW.com

<https://swingw.com>



Pro Touch 4.pdf



SwingW.com/YouTube



### SwingW.com Pro-Touch 4 Data

SERIAL# = 25031601  
MFG DATE = 3/16/2025  
FIRMWARE = 4.0  
LEFT CALIB = 399.214  
RIGHT CALIB = 444.323  
LEFT CUST CALIB = 0.000  
RIGHT CUST CALIB = 0.000  
ARM DIST = 21.53

### ... SCALE RESULTS ...

LEFT GRAMS = 25.8  
RIGHT GRAMS = 69.2  
TOTAL GRAMS = 95.0

### SwingW.com Club Measurements

Club: COBRA 3 IRON  
Swingweight: C9.6  
Total Grams: 424.7  
Inch Grams: 6028  
Buit: -132.0  
Shaft: 556.7  
Balance Point: 28.20