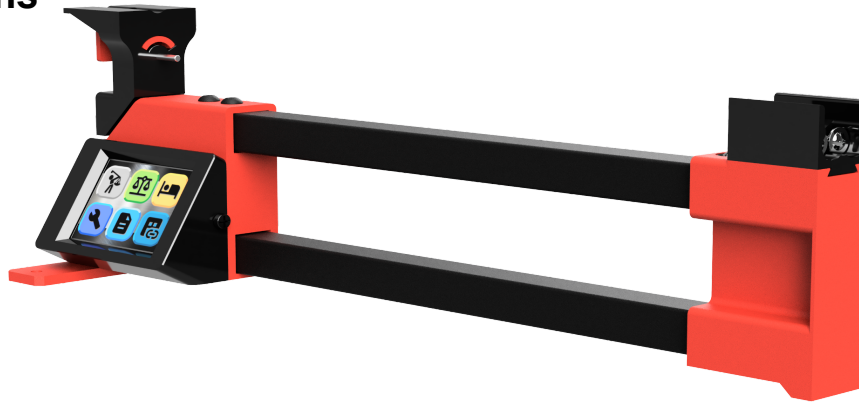


Operating Instructions

SwingW.com

Touch Mini Digital Swingweight Scale



Introduction:

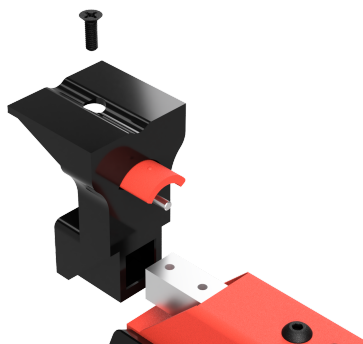
The Touch Mini Digital Swingweight scale is fully electronic and has no moving parts to create mechanical errors. It is based on our Pro Touch unit, but only uses one load cell and a fixed 14 inch fulcrum. Because it is fully electronic and calibrated, it should be treated a bit more like a precision instrument. Keep and use the unit in a conditioned space. All electronics are susceptible to harsh environments and this product is no different.

Contents:

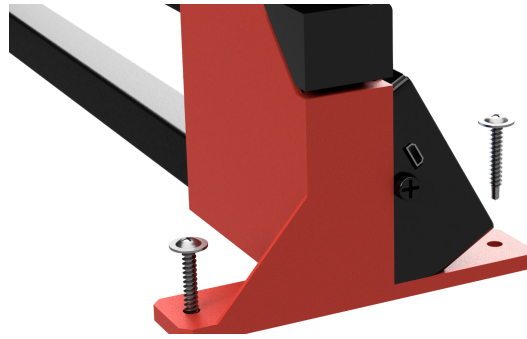
- One Touch Mini scale
- One grip end support with screw
- One MicroUSB power supply

How to use:

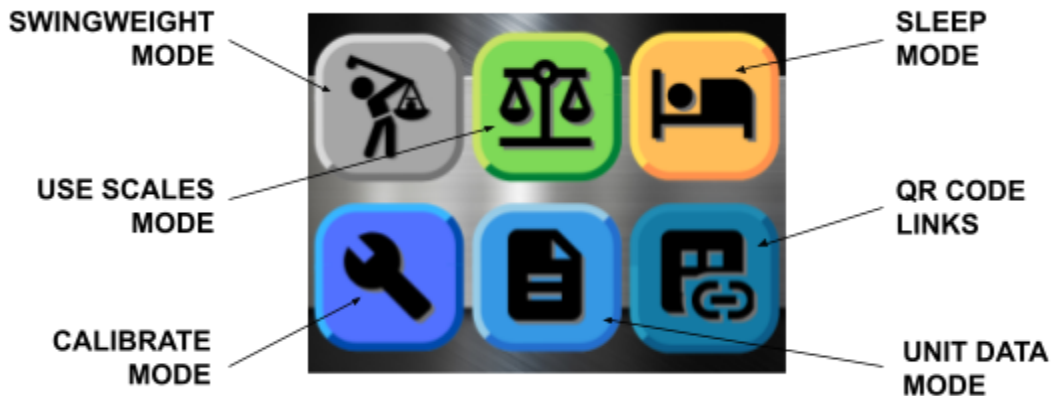
1. To reduce potential shipping damage, the grip support is shipped un-installed. Use the provided screw to attach the support. **DO NOT OVERTIGHTEN.** Snug tight is just fine. The load cell can be mechanically overloaded, so only use a hand phillips screwdriver (no power tools).



2. Set the scale on a level surface such as a countertop or workbench. Because there are no moving parts, the scale does not need to be leveled if the surface is reasonably level.
3. Use two mounting screws to secure the scale to the surface. Mounting the scale to a piece of laminated shelving (melamine) will make things more portable. Optionally, you can use a clamp to temporarily secure the scale to the surface. **THE SCALE MUST BE SECURED TO THE SURFACE TO AVOID TIP-OVER OF THE SCALE AND CLUB.**



4. Plan ahead on your set-up to allow the head of the club to overhang the horizontal surface if needed. All of the club's weight must be resting on the scale.
5. Plug the power supply into a 120v receptacle. Plug the microUSB cord from the power supply into the USB receptacle on the left side of the scale control box.
6. After a brief startup and calibration mode, the unit will display the "HOMESCREEN". From there, you can navigate to the desired mode. If you've entered in a "custom" calibration, a "CUSTOM CALIBRATION IN USE" reminder will be displayed during start-up.



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 and/or epoxy covered fingers.

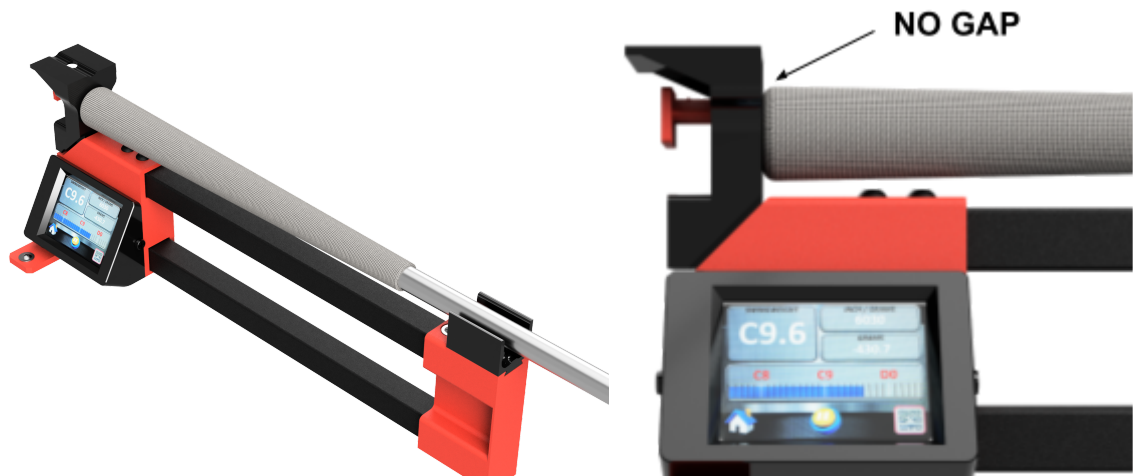
SWINGWEIGHT Mode:

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.
3. A **GREEN** check means the load cell is within 1 gram from zero and you are ready to measure the club swingweight.

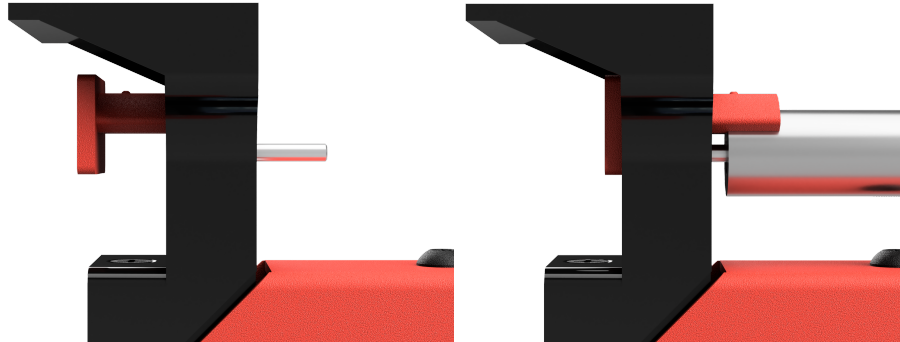
4. A **YELLOW** check means the load cell is between 1 and 2 grams from zero. You should **TARE** the scale for a more accurate reading.
5. A **RED** check means the load cell is more than 2 grams from zero. You should **TARE** the scale for a more accurate reading. If left in the **RED** check state, 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 grip support 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. The pin on the left (grip end) support is meant to fit in the hole in the end of the grip. The grip **MUST** be all the way up against the support vertical face. The shaft sets in the shaft support on the right end of the scale.



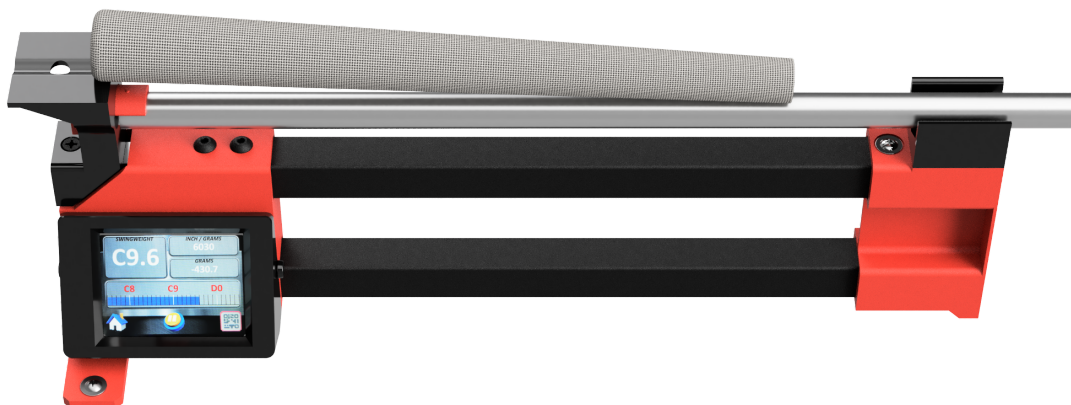
9. Once you load the club, the swingweight and other club data will be displayed automatically. The dial has a blue bar graph which will slide left to right to simulate an analog swingweight reading. Each tick mark is 1/10th of a swingweight. This will help you fine tune to a desired swingweight. **NOTE: IF THE CLUB IS BOUNCING AROUND AFTER LOADING, THE READINGS WILL BOUNCE AROUND. WHEN LOADING THE CLUB, BE CAREFUL TO NOT INDUCE EXTRA VIBRATION TO THE SHAFT.**



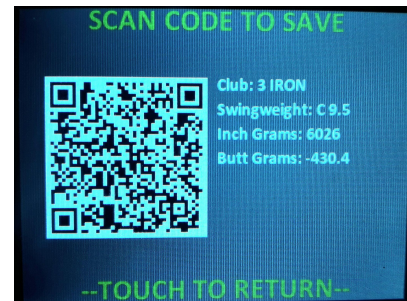
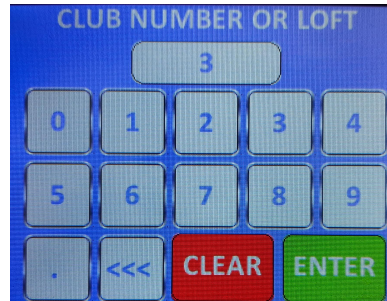
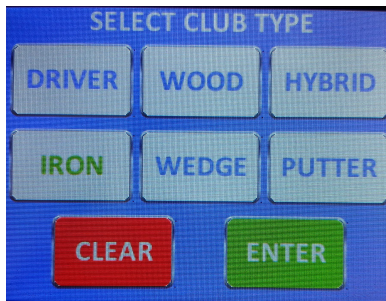
10. When you press “PAUSE”, the readings will stop and the screen will show the last reading continuously. When you press “PLAY”, the scale will start reading and updating the screen accordingly.
11. Use the shaft adapter when you want to weigh a club or shaft without a grip. The shaft adapter slides in and out as needed. It allows the shaft to remain centered and fits over the pin on the grip end support. It has a $\frac{1}{8}$ ” thick stop to simulate the thickness of the grip cap. Position the end of the shaft against this stop during measurements.



12. You can temporarily rest the butt of the new grip on the shaft and platform to estimate the total club weight. **SWINGWEIGHT WILL NOT BE ACCURATE WITHOUT THE GRIP IN PLACE.**



13. 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 NUMBER OR LOFT” screen.
14. The “CLUB NUMBER OR 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.



15. You can 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 above. 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'll experience a few grams of drift on the readings. That's normal with all load cells. If in doubt, remove the club, TARE the scale and take a new reading.

USE SCALE Mode:

1. Entering the USE SCALE mode will allow you to see the readings of the load cell in real time. The scale has a built in weight support platform with a groove to keep round objects from rolling off. You can use this feature to check the accuracy of the scale, a club's finished weight, measure individual components and for calibration (covered in a later section). The scale gives real time readings in both grams and ounces.



2. You can add a known weight to the weight holder to check the load cell. At any time, if you press the SCALE icon in the lower right corner, the load cell will enter a TARE cycle.
3. DO NOT EXCEED 1000 GRAMS (2.2 LBS) on the load cell.

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 micro USB 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.

UNIT INFO Mode:

Entering the UNIT INFO mode will display information about the manufacturing date and calibration factor. It will also show any custom calibration factor that the user may have implemented.

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 to perform this calibration.



1. Choose "CALIB. LOAD CELL". The scale will do a TARE automatically.
2. Next the display will ask you to add the 500 gram weight to the weight holder and touch the screen.



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 SCALE" mode to verify your new calibration. The scale will ignore factory calibration and use your custom calibration until you cancel this custom

calibration. When the scale powers up, you'll see a message saying you are using custom calibration settings.

5. To restore factory calibration, press the "RESET CALIB" button.

Printer Mode (beta):

The Touch-Mini 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 Touch-Mini 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 \$30 to \$40. We suggest you order extra rolls of 57mm thermal printing paper too. This feature is free to use, but may become non-functional if the printer's firmware changes.



How to Use:

The printer will print out 3 screens: It will give swingweight results (with QR code) from the swingweight screen. It will also print the "UNIT DATA" and the "QRCODE" 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 Touch Mini will show the printer icon on the appropriate screens. Once you press the "PRINTER" icon, the information will be sent to the printer and after a brief delay, it should print out.



The printer is battery powered and **DOES NOT** plug into the Touch-Mini. This function is free to use, but **NO** warranty on this functionality.

Conclusion:

We hope you enjoy the use of your new Touch Mini Digital Swingweight Scale. We spent a considerable amount of time developing it. The components are assembled in a way that they can be disassembled, but we caution you against it. The 14" 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 the load cell to make sure it reads as accurately as possible. It's best to keep it that way.!

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Version 1.0