

# ***Pro Tournament Scales***

Tournament Weighing System

## **Model 357**

### **Instruction Manual**



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## **ProTournament Scales**

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# Specifications

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## Calibration Method

Software calibration with long term storage in EEPROM

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## Serial Communications

Mode Full Duplex, Baud rate - 1200 bps

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## Data format

8 data bits, non-parity, 1 stop bit

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## Power

Alkaline Batteries 4 x “AAA” batteries (When all displayed segments of the LCD display flash, the batteries are low and should be replaced immediately.)

AC Adapter 6 VDC, 500mA, with center positive (see Fig. 1)

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## DC Power Consumption

25mA@6Vdc (does not include weigh table)

Operation temperature 9° to 107°F (5° to 35°C)

**Note: voltage in the excess of 8 volts will cause damage to the scale indicator.**



**Fig. 1**

Diagram of power connector

## **CAUTION!**

### **DO NOT CONNECT TO 12VOLT BATTERY!**

The Model 357 Scale system is designed to operate off 6Volts  
Connecting the Model 357 Scale System to a 12V Battery or a 12Volt power supply will damage the unit.

It is not recommended to use battery cables with the model 357 as people unfamiliar with the system could connect them to 12Volts. It is recommended to use the onboard battery compartment with 4 'AAA' Batteries (6Volts)

# Features

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## **AZT Automatic Zero Tracking**

This feature will electronically returns the scale back to zero when the weight is removed from the scale. There are several reasons weigh scales do not return back to zero. As the ambient temperature increases or decreases this will affect the scales “zero point”. If you have ever had a scale on, zeroed it out, and come back later only to find the scale no longer was reading zero, temperature drift was probably a factor.

Another reason scales used at fishing tournaments do not return to zero is because the buildup of water drops on the scale table. It does not take very many water drops to accumulate .01 lbs.

The AZT (Auto Zero Tracking) feature will automatically reset the scale to zero anytime the weight is within 5 counts (.05lb) of the zero point set with the front panel zero button.

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## **Motion Averaging**

This feature measures the applied weight many times a second and “averages” the readings. This feature minimizes unstable weight caused by active fish and windy days.

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## **Motion Lock**

One of the most frustrating jobs of the weigh master, is to guess what the actual weight on the scale is when the numbers are fluctuating. The Model 357's “HOLD” feature will “Lock” onto the highest average reading and display it on the screen along with a “HOLD” indicator. This value will remain on the screen even after the weight is removed from the scale. Pressing the “Hold key” after the weight is removed will unlock the weight reading and allow the scale to return to zero.

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## **Units**

The 357's “Unit key” allows the operator to switch between the scale reading out in lbs only to the nearest .01 lb or lbs and oz to the nearest .1 oz. This feature allows the scale to be used in different types of tournaments with different requirements on the weight recording.

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## **Tare**

The “Tare key” will zero the weight of the container on the scale.

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# Button Definitions



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## Zero - ON/OFF key

Press this key to turn the scale on. The display will show the scale's capacity, the scale will automatically zero if the weight is within 10% of the calibrated zero point, and a value of zero will be displayed. The scale powers up in the same unit of measure as when it was turned off. Press this key to zero the scale. Press and hold this key for five seconds to turn the scale off.

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## Tare Key

Press this key to tare the weight on the scale. The "NET" annunciator will illuminate. (Triangle on display pointing to the word NET printed on lexan). To cancel a tare, press the tare key with all weight removed from the scale.

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## Units key

Press this key and the scale will automatically toggle from lbs to lbs/ozs each time the key is pressed. The Model 357 will retain the units configuration when powered down.

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## Hold / Print key

This key operates the Hold mode and will send the weight reading to an optional remote printer.

# Internal Battery

## Battery power

The battery compartment is located on the back side of the 357 indicator case. To remove the cover, slide the latch towards the center of the cover. Lift the cover off and a compartment that holds 4 AAA batteries will be exposed. Insert the batteries following the plus and minus signs molded into the well. (The battery ends will be marked with a plus[+] and minus[-] symbol) After inserting the batteries, replace the cover and slide the latch back to the “close” position. Standard alkaline batteries are recommended and will provide a battery life of 20 hours or more. When the indicator display starts flashing, the batteries are weak and should be replaced immediately.



# Mounting Brackets

The Model 357 is supplied with an indicator carrier and two different styles of angled brackets. The 357 display has been designed so that the optimum viewing angle is between a 12:00 and 4:00 viewing angle.

(See Fig 2-2)

Select the brackets that give the optimum angle for best display contrast for your application.

NOTE -When using the large angle brackets, the indicator should be mounted at eye level or higher.



Figure 2.1

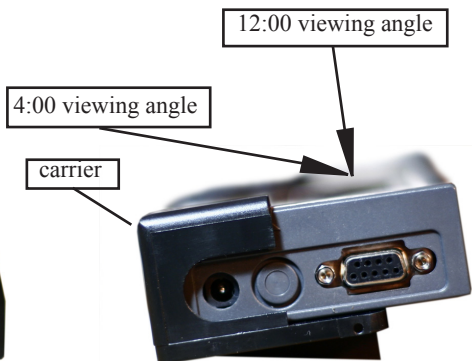


Figure 2.2

# Operating Instructions

Thank you for purchasing the Model 357 weighing system. Please read all instructions carefully before using the indicator and keep the following points in mind:

- Avoid lengthy exposure to extreme heat or cold. Your scale works best when operated at normal room temperature. Always allow the scale to acclimate to a normal temperature before use.
- Allow sufficient warm up time. Turn the scale on and wait for a few minutes if possible, to give the internal components a change to stabilize before weighing.
- These electronic scales are precision instruments. RF devices such as cell phones, two-way radios and computers could cause unstable readings if located too close to the system. If your scale ever performs poorly, try increasing the distance from RF devices.

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## Normal Weighing

1. Turn on the scale with no weight on the weigh platform.
2. The arrow icon next to "ZERO" on the lexan should be on, if it is not then press the "Zero" key to zero the scale.
3. Press the units key to select "lbs only" or "lbs/ oz".
4. Place a weight on the scale.
5. Weight is stable when the "lb" symbol stops flashing.
6. Remove weight, scale will return to zero.

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## Weighing using the Tare feature

1. Turn on the scale with all weight removed from the weigh platform.
2. Press the "Units" key to select "lbs only" or "lbs/ oz".
3. Place the empty container on the weigh platform.
4. Press the "Tare" key and the weight reading will go to zero and the arrow next to the word "NET" on the lexan will turn on.
5. Place the weight in the container on the scale.
6. Weight is stable when the lb symbol stops flashing.
7. Read the weight on the display.
8. If the container and weight are removed the scale will read a negative weight equal to the weight of the container.
9. If only the weight is removed the indicator will return to zero. If the weight does not return to zero, press the "Tare" key.

**NOTE:** Auto Zero Tracking does not function in Tare mode.



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## Weighing with the Hold feature

The hold feature on the Model 357 is turned on and off by pressing the “Hold” key for each weigh-in. This feature takes the guess work out of reading an unstable scale and the weight will remain on the screen until it is cleared by the operator.

1. Turn on the scale with all weight removed from the weigh platform.
2. Press the Units key to select “lbs only” or “lbs/ oz”
3. Press the “HOLD key” and the arrow icon next to the word “HOLD” on the lexan will be visible.
4. Place the weight on the weigh platform.
5. The Hold icon will flash until the scale has locked onto the highest average reading.
6. Weight is stable when the “lb” and “Hold” symbols stop flashing.
7. Remove the weight and the scale will continue to “Hold” the weight on the screen.

**NOTE :** If additional weight is added to the weigh table that exceeds the current held value , the indicator will lock onto and hold the higher weight.

8. To unlock the held weight, press the Hold key, the Hold icon will turn off indicating the hold function is turned off.
9. The Hold key must be pressed and the Hold Icon must be on to enable the Hold feature.

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## Get familiar with your system

We recommend that you practice with these different methods of weighing and determine which method fits the needs of your weigh-ins. Be sure you understand exactly how the scale is operating and the difference between the various weighing modes. The Model 357 has features that most scales do not have.

A good example is if someone would put a .04 lb weight on the scale, they would not understand why the scale will not read .04 lbs. If they knew about AZT (Auto Zero Tracking) then they would know that the scale continuously compensates for temperature drift and water drops or dirt left on the scale weigh platform.

The Hold feature is a great option that most tournament fishing people use. Be sure you understand its operation completely before you (and your weigh-master) go to your first tournament.

# Display Symbols

1. **xxxxxx lb/oz** the scale capacity is xxxxxx lb or lb/oz
2. **0** — zero point is over calibration zero + 10% Full capacity
3. **0** — zero is below calibration zero – 10% Full capacity
4. **Ad** — ADC is over max. range;
5. **Ad** ADC is below min. range;
6. **— — — —** weight signal is too large
7. **— — — —** weight signal is too small
8. **EEP.E0** the EEPROM can't be accessed;
9. **EEP.E1** The parameters are not same with backup data.
10. **EEP.E2** The setting parameter(s) are set to custom.
11. **A.oFF.x** the auto-off time is set to x minutes (when x=0, the scale will not auto-shutoff)
12. **CAL-Px** scale's calibration point
13. **CAL.Er** there is an error in calibration
14. **XXXXXX** display division is xxxxx, (xxxxx=500...80000)
15. **UNIT.X** selected the unit for the capacity and standard calibration weight is kg(x=0, uu=kg), or lb(x=1, u=lb) .
16. **d. x** division size is x, (x=1,2,5)
17. **dot. x** the location of decimal point, (x=0,1,2,3)
18. **►** hold function is active.
19. **F-Set** in Function Set mode
20. **FS** — exceeds Full Scale display capacity (199999)

## A Care Note

The Model 357 Scale System is NOT completely water-proof. The base is water resistant but the indicator is not. When putting this scale system away it is imperative that you thoroughly dry the system before sealing it in the storage case. The Seahorse storage case IS water proof and will also trap any water inside.

If scale is put away wet it may or may not function properly the next time you attempt to use it.  
please be sure to dry the unit out after every use.

# Remote Display

The remote display connects to the 9-pin connector located on the right end of the indicator. The remote display is designed to read 0 weight when a negative weight value is sent.

When in lbs only mode the remote display will read **xx.xx** (decimal point) to the nearest .01 lb. If the the indicator is in lbs/oz mode the display will read **xx:xx** (colon). (SB-45 series only) The digits to the left of the colon are whole pounds, the digits to the right of the colon are whole ounces. If you have a 6 digit remote display the remote will display ounces to the nearest .1 oz.



Plug the remote display radio hub into the side of the Model 357 scale indicator and screw down thumb screws.

Make sure a fully charged 9-volt battery is in the radio hub and turn the radio hub on.

With both the scale and the radio hub ON, the weight will begin transmitting to the remote display.

In some instances it could take up to 30 seconds for the Radio hub and remote display to sync up and for the remote display to begin displaying the weight.

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