H2 SERIES

Professional Weighing System

2   Introduction

This manual covers the information you need to operate your
H2 Series indicator.

2.1 Front Panel

The **H2** Series indicator face is shown in Figure 2.1.

*Figure 2.1 Front Panel*

2.1 Connections

The **H2** Series indicator has only two connections.
Connection 1 (four male pins) is the input power, connection 2 (four female pins) is for the weigh table connector.

4-pin Power connector   *4-Pin Weigh table connector*

2.1.1 Weigh Table Setup

The weigh table contains a precision load cell and should be placed on a flat stable surface for optimum weighing results. The platform has four adjustable feet that can be adjusted to prevent the table from rocking. A bubble level is located under the table cover to assist in leveling the weigh table.
Care should be taken that the weigh platform cover's notched opening is located on the side of the table where the load cell cable exits. Inaccurate results and possible damage to the cord can result if the notched opening is located on one of the other 3 sides.
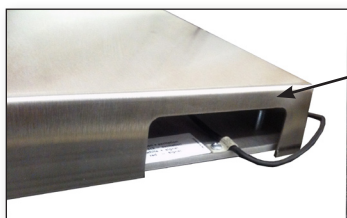
Important Orient table cover so that notched opening is located over the load cell cable.

3

2.1.2 Internal Rechargable Battery Pack

The H2 Series starting with Ver 2.0 (Feb 15, 2011) are equipped with an internal rechargable Lithium-Ion battery pack. This battery pack when fully charged will operate the indicator for over 24 hours with the backlight turned off. When the backlight set to 100% brightness, the battery pack will operate the scale for over 6 hours. When using the indicator in daylight, the backlight provides little or no benifit.

(See page (12) for instructions on how to adjust brightness or turn off the H2 indicator backlight.)

The battery pack when fully discharged will recharge in 4-6 hours using the supplied charger. (The first initial charge can take up to 12 hours to fully charge)

NOTE: The charger supplied with this scale is specifically designed by the manufacturer of the lithium-ion batteries. The use of any other power source or battery charger could harm the battery pack and and H2 indicator scale.

The scale may be used and the weight readings will be accurate during charging of the battery pack.

The installed battery pack is a very high quality battery pack used to provide power to computer equipment. It is designed to be completely discharged and charged over 500 full cycles. In the event the battery should no longer charge, please return to the factory to have the battery pack replaced. Replacing the battery pack with a diffennent style can damage the indicator.

2.1.3 Charging the H2 Battery Pack

The H2 indicator is supplied with a battery charger designed to charge the special Lithium-ion batteries in the indicator. Located on the charger is an indicator light that is red during the charging cycle and will turn green when the batteries are fully charged. The self discharge rate on the H2 battery pack is very low, so the batteries can be charged several weeks before using the indicator. The indicator can be removed from the charger and used with a partial charge if that need should arise.

Charge on the go!
With the use of a 12V to 110volt convertor (400watt minimum), you can charge your H2 battery pack from the power accessory plug of your automobile.

2.1.4 Face Plate Key Descriptions

Key names will appear as bold, upper case words in this manual.
Examples: **TARE, G/N**, etc.
Annunciators will appear as italic words. Examples: *G/N, Lb*, etc.
Displayed messages will appear as bold, italic words. Examples: ***HELLO, LO-BAT***, etc.

There are a total of 8 keys. All keys except the ON/OFF will have audible feedback with low, medium, or high volume settings.

ON/OFF	Press to turn the unit On/Off
TARE	Press to tare the weight on the scale
ZERO/CLEAR	Press to zero G/N weight. It also is used to clear memory channels.
G/N	Press to toggle between gross and net weight
HOLD/MENU	The HOLD feature is currently not used and is for future applications. The MENU key is used to move to the right in the menu structure. Use this key to also move the numeric entry cursor one space to the right. This will be explained later in the manual.
PRINT*/SELECT	This key is also used to move down in the menu structure.
RECALL	Press this key to access a memory channel. Also, use this key to increment numbers during the numeric entry procedure.
SAVE	Press this key to save angler's weigh-in value to the internal memory buffer and to the lower display on ProTournament Scale's dual remotes. Also, this key will decrement numbers during the numeric entry procedure.

* The print button has no function at this time on the H2 indicator. It is for future applications.

2.1.5 Annunciators

The **H2** Indicator has seven triangle annunciators:

G/N	Indicates the unit is in the gross/net weighing mode.
NET	Indicates the unit is in the net weighing mode.
MOTION	Displayed when there is scale motion.
lb/oz	Indicates the unit is weighing in pounds and oz.
lb	Indicates the unit is weighing in pounds.
AUTO	Displayed when auto-loc is enabled
kg	Indicates the unit is weighing in kilograms.

2.2 Display Messages

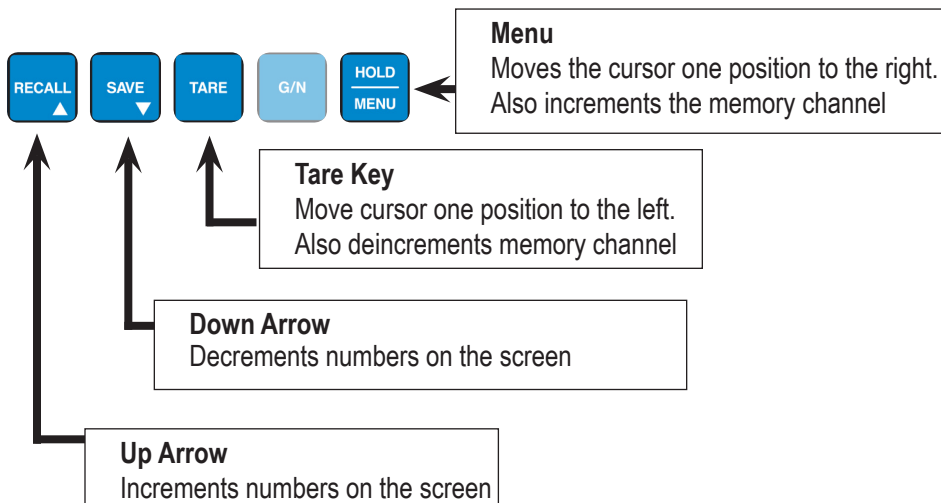Following are the messages that may appear on the display and what they mean:

H2 SERIES	Message displayed on power-up sequence for 3 seconds
----------	DASHES, The **H2** has invalid input signal
NO TARE	Displayed when you press the G/N key and there is no tare weight established.
PRINT	**H2** is transmitting data. Appears after pressing the print key for a one second.
LO-BAT	Alternates on the display between current mode and LO-BAT when input voltage is between 9-10 volts.
HOLD	Used to retain value on display
L XXXX	XXXX = weigh value Displayed when the indicator is in AUTOLOC mode and has locked on a weight.
+Range	Displayed when weight input exceeds 8 mV/V.
-Range	Displayed when weight input exceeds -8 mV/V.
SHTDWN	Is shown on the display prior to shutting the indicator off after the sleep timer has expired, or when you press the ON/OFF key.
CAN'T	Displayed when attempting to access too large of a numeric entry OR memory channel number greater than 100 OR if trying to zero in net mode.
MAINT	Maintenance required. System should be sent in for checkup and calibration.

2.3 Numeric Entry Procedure

The keypad is used to enter and recall data.
Anytime you need to enter numeric values, use the keys as described below.
The note below will appear throughout areas of the manual to remind you of
the key presses needed to enter numbers.

Menu
Moves the cursor one position to the right.
Also increments the memory channel

Tare Key
Move cursor one position to the left.
Also deincrements memory channel

Down Arrow
Decrements numbers on the screen

Up Arrow
Increments numbers on the screen

EXAMPLE: To enter the number 5230:

1.　When in a data entry screen, press the **Up Arrow** key several
     times until…
     5 is displayed on the screen

2.　Press the **HOLD/MENU** key and the cursor will advance one
     position to the right… (an underscore will appear on the screen)
     *5_* is displayed on the screen

3.　Press the **Up Arrow** key several times until the number reads a
     2…
     52 is displayed.

4.　Press Print/Select key to enter number.

7

2.4 Getting Started

Before using your new ⊨⊇ indicator:

• Please verify that power is applied to the indicator and the weigh table has been connected the 4-pin connector on the bottom side fo the indicator.
• Verify the system is weighing properly. Do this by following these steps:

1. In the gross weighing mode, zero the indicator by pressing the **ZERO/CLEAR** key. A value of 0.00 should be displayed on screen. (If in locked condition shown by an L on the left side of the screen, hold the zero button for 2 seconds.
2. Place a known weight on scale (example: 5lb bag of sugar) If the weight reading is correct, your system is working properly and you can continue with operation of the system. If your scale is not reading correctly contact tech support at ProTournament Scales.

2.5 Mounting the H2 Indicator

The ⊨⊇ Indicator is equipped with RAM universal mounting system that will allow you to adjust the indicator so it is both easy to operate and easy to view.

Choose a mounting location that is:
• Convenient for operation and viewing of the indicator.
• Provides stable mount so keys can be pressed easily.

To adjust the viewing angle of the H2 indicator, loosen the tension knob, adjust the unit for optimum viewing angle and then hand tighten the tension knob. (Only light tightning pressure is required to hold the indicator in position.)

Map of Menu System
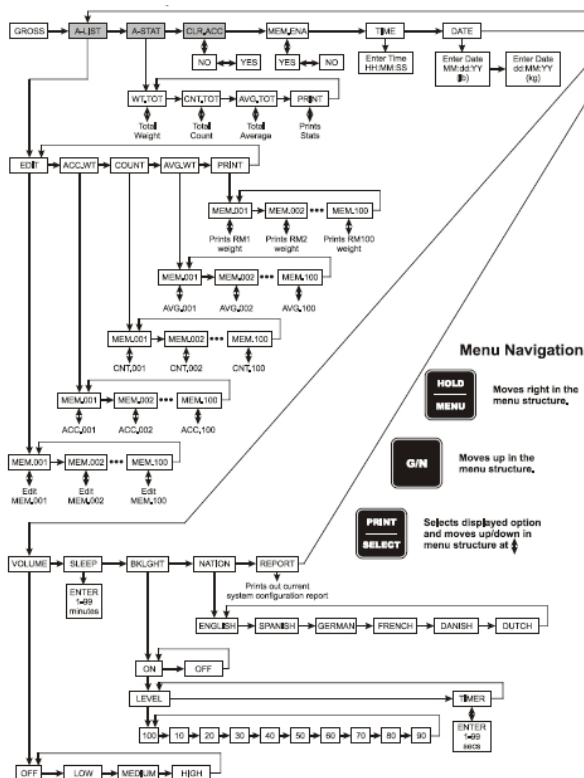
Below is a summary of the items in this menu, followed by a comprehensive explanation of each item:

A-List	Used to edit the memory location descriptions
A-Stat	Used to access the statistics of the memory bank
CLR.ACC	Use this to clear all memory channels
MEM.ENA	Use this to disable or enable memory channel functions. If enabled, ALIST, A-STAT and CLR.ACC do not appear in the user menu.
TIME	Use to set the time module inside indicator
DATE	Use to set the date module inside indicator
VOLUME	Use to set the volume of the audible key buzzer.
SLEEP	Use to set the amount of inactive time before the indicator turns itself off.
BKLIGHT	Use to set the backlight brightness. (Off, 10%-100%)
REPORT	Use to print out indicator 'system configuration settings'.

3.4 Viewing or Changing the Time

The time can be set and an internal battery will maintain the time without external power.

Press and hold the MENU button for two seconds and release to enter User Menu Section.

HOLD / MENU

G/N

A-LIST

HOL/MEN **HOL/MEN** **HOL/MEN** **HOLD/MENU**

(Press MENU key four times until "TIME" is shown)

G/N

TIME

PRINT / SELECT

G/N

114432

Move cursor to right

RECALL ▲ **SAVE ▼** **HOLD / MENU**

Decrement number

Increment number

Use the UP arrow, DOWN arrow and MENU buttons to set the current time. See page 5 for data entry method.
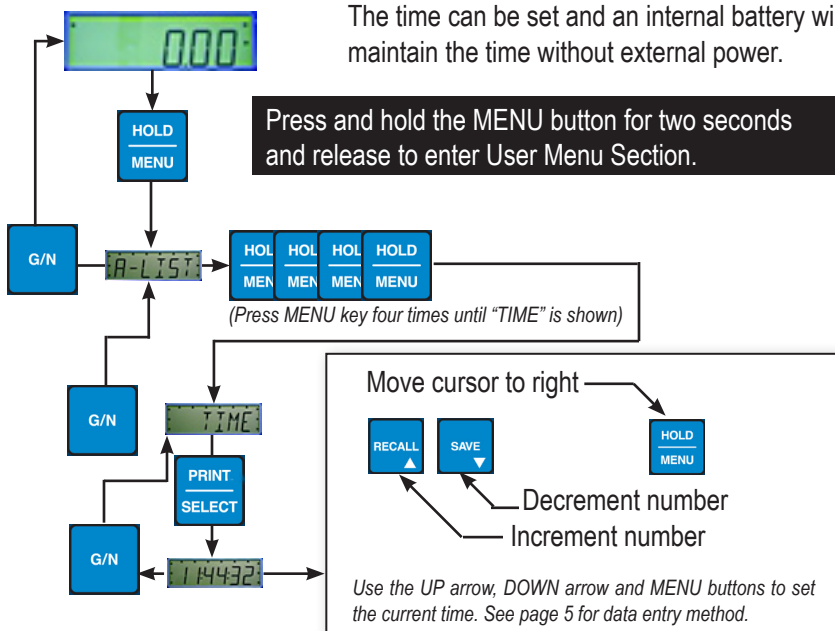
3.5 Viewing or Changing the Date

The ddate can be set and an internal battery will maintain the date without external power.

Press and hold the MENU button for two seconds and release to enter User Menu Section.

HOLD / MENU

G/N

A-LIST

HOL/MEN **HOL/MEN** **HOL/MEN** **HOL/MEN** **HOLD/MENU**

(Press MENU key five times until "dATE" is shown)

G/N

dATE

PRINT / SELECT

G/N

012710

Move cursor to right

RECALL ▲ **SAVE ▼** **HOLD / MENU**

Decrement number

Increment number

Use the UP arrow, DOWN arrow and MENU buttons to set the current date. See page 5 for data entry method.
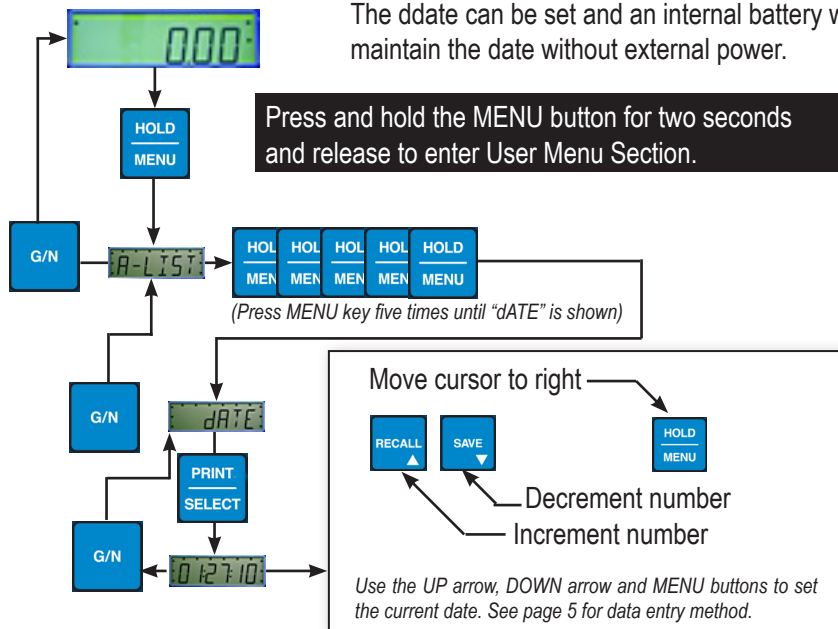
3.6 Entering / Viewing the Audible Setting

The ☰☲ Indicator keys have audible feedback that can be configured for off, low, medium, or high. (Factory default is high)

Press and hold the MENU button for two seconds and release to enter User Menu Section.

(Press MENU key six times until "VOLUME" is shown)
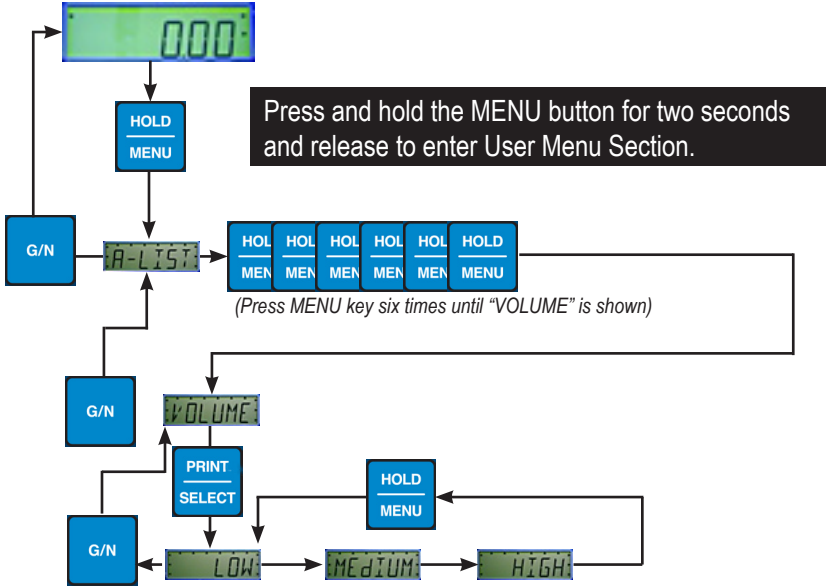
3.7 Entering / Viewing the Sleep Setting

The ▄▄▄ Indicator has a sleep mode that can shut the unit off if the following conditions occur:
- The indicator doesn't see any keys being pressed, or
- The weight hasn't changed by more than 1% over the number of minutes that was entered for the sleep setting.

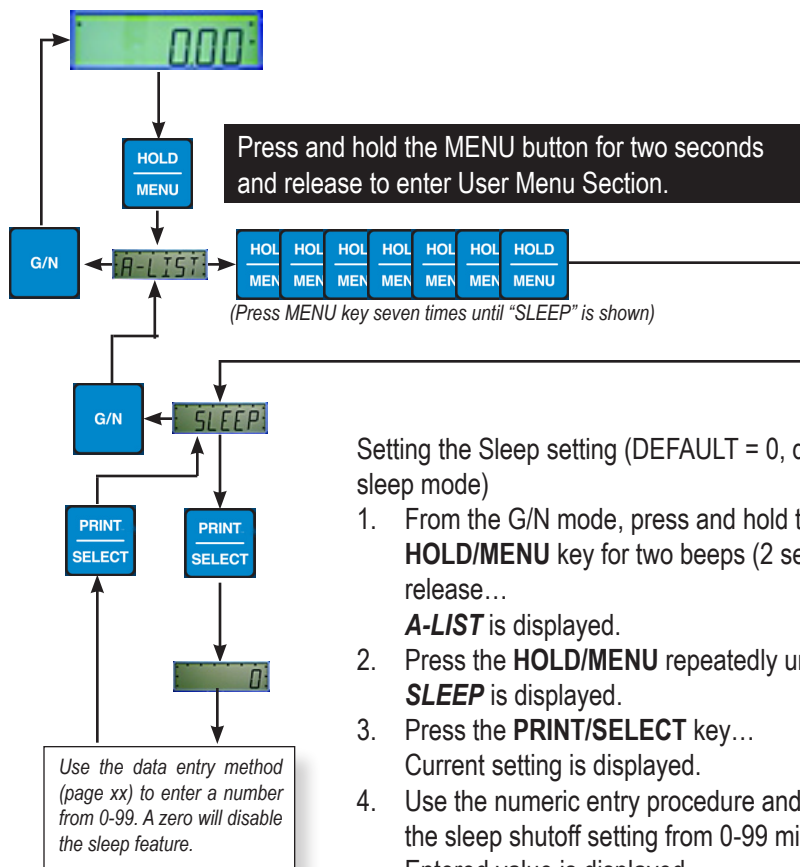Press and hold the MENU button for two seconds and release to enter User Menu Section.

(Press MENU key seven times until "SLEEP" is shown)

Use the data entry method (page xx) to enter a number from 0-99. A zero will disable the sleep feature.

Setting the Sleep setting (DEFAULT = 0, disables sleep mode)

1. From the G/N mode, press and hold the **HOLD/MENU** key for two beeps (2 sec), then release…
   A-LIST is displayed.
2. Press the **HOLD/MENU** repeatedly until…
   SLEEP is displayed.
3. Press the **PRINT/SELECT** key…
   Current setting is displayed.
4. Use the numeric entry procedure and enter in the sleep shutoff setting from 0-99 minutes…
   Entered value is displayed.
5. Press the **PRINT/SELECT** key…
   SLEEP is displayed.
6. Press the **G/N** key…
   Returns to normal weigh mode.

3.8 Setting the Backlight Brightness Level

The **H2** Indicator has a backlight you can configure. Follow these steps to configure backlight operation. Lower settings will increase battery life. Turn backlight off for maximum battery run time.

```
        ┌──────────┐
        │   000    │
        └──────────┘
             │
             ▼
         ┌───────┐      ┌────────────────────────────────────────┐
         │ HOLD  │      │ Press and hold the MENU button for two  │
         │ MENU  │      │ seconds and release to enter User       │
         └───────┘      │ Menu Section.                           │
             │          └────────────────────────────────────────┘
 ┌─────┐     ▼
 │ G/N │◄─ A-LIST ──► HOL HOL HOL HOL HOL HOL HOL HOLD
 └─────┘              MEN MEN MEN MEN MEN MEN MEN MENU
                      (Press MENU key eight times until "bkLIGHT" is shown)
```
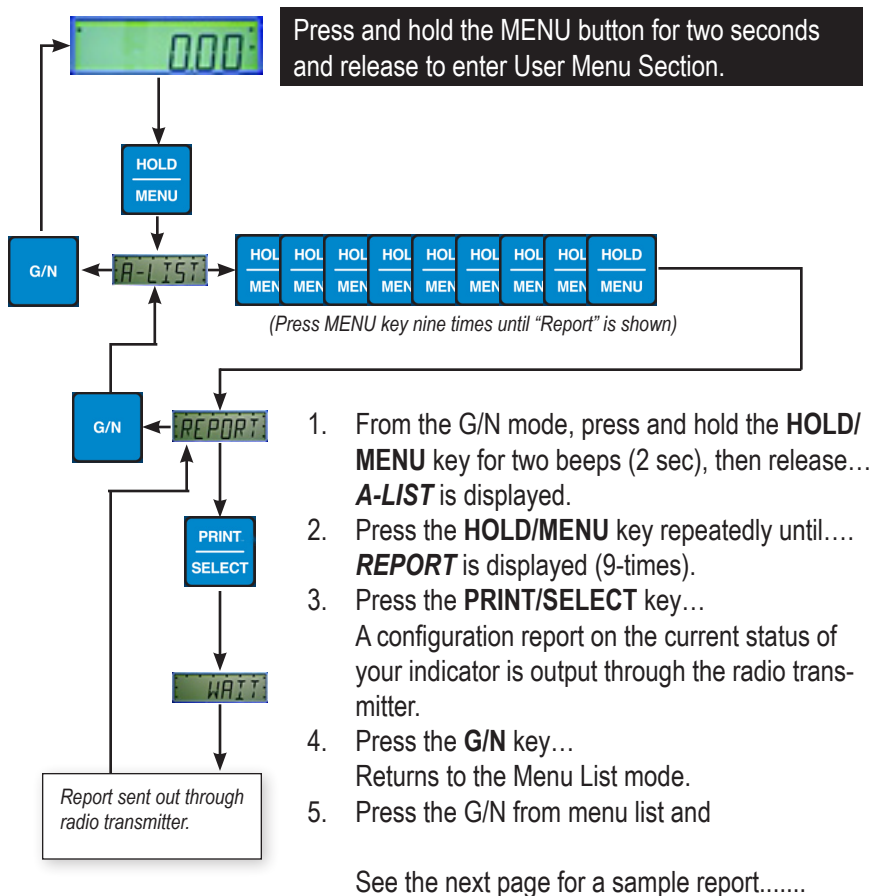
(Press MENU key eight times until "bkLIGHT" is shown)

```
 ┌─────┐
 │ G/N │◄─ bkLGHT
 └─────┘      │
             ▼
         ┌───────┐
         │ PRINT │
         │ SELECT│
         └───────┘
```

```
 ┌─────┐                  ┌───────┐              ┌───────┐
 │ G/N │◄─  ON  ────────► │ HOLD  │──► OFF ────► │ HOLD  │
 └─────┘       │          │ MENU  │              │ MENU  │
              ▼           └───────┘              └───────┘
         ┌───────┐
         │ PRINT │
         │ SELECT│
         └───────┘
```

An ON means the backlight is turned on, an OFF turns the backlight off to conserve battery power.

```
   LEVEL ────► ┌───────┐──► TIME ──► ┌───────┐
      │        │ HOLD  │              │ HOLD  │
      │        │ MENU  │              │ MENU  │
      │        └───────┘              └───────┘
      │            ▼                     ▼
      │        ┌───────┐             ┌───────┐
      │        │ PRINT │             │ PRINT │
      │        │ SELECT│             │ SELECT│
      │        └───────┘             └───────┘
      │            ▼                     ▼
 ┌─────┐          100          ┌─────┐    0
 │ G/N │◄──────────            │ G/N │◄──────
 └─────┘            │          └─────┘
                   ▼
               ┌───────┐
               │ HOLD  │
               │ MENU  │
               └───────┘
```

Press the MENU key to enter a number from10-100. 100 is full backlight brightness, 10 is 10% brightness.

Use the data entry method (page xx) to enter a number from 0-99 minutes before backlight turns off . A zero will disable the time out feature.

13

3.9 Language Selection (currently not available)

The **⊟⊟** Indicator at this time does not support any language other than English. This feature will be added to units that will be exported.

3.10 Printing a Configuration Report

Press and hold the MENU button for two seconds and release to enter User Menu Section.

HOLD / MENU

G/N — A-LIST

HOLD/MENU ×9

(Press MENU key nine times until "Report" is shown)

G/N — REPORT

PRINT / SELECT

WAIT

Report sent out through radio transmitter.

1. From the G/N mode, press and hold the **HOLD/MENU** key for two beeps (2 sec), then release… *A-LIST* is displayed.
2. Press the **HOLD/MENU** key repeatedly until…. *REPORT* is displayed (9-times).
3. Press the **PRINT/SELECT** key… A configuration report on the current status of your indicator is output through the radio transmitter.
4. Press the **G/N** key… Returns to the Menu List mode.
5. Press the G/N from menu list and

    See the next page for a sample report.......

NOTE: The only way to see this report is with the wireless printer option or ProTournament Scale's capture software.

A sample report is shown below:

```
----------------------------
SYSTEM CONFIGURATION SETTINGS
04-25-2006 11:29:00
----------------------------
PART : 60259-0026
REV : 1.9.0
USER'S MENU
-----------
VOLUME: HIGH
SLEEP TIMER : OFF
BKLGHT: ON
LEVEL : 100%
NATION: ENGLSH
MEMENA: ON
640 SETUP MENU
--------------
MODE : 640
CONFIG: S130
1.0 MV/V: 37470 LB
O-CAP : 200000 LB
DIV : 10 LB
PRINT FORMAT: G-T-N W/ DATE-TIME
CLOCK : 24 HR
DATE : MM-DD-YY
AUT.LOC: OFF
AUT.ACC: OFF
INPUT1: STD
INPUT2: STD
UPDATE: 5 HZ
AVERGE: 30
FILTER: ON
CONST : 2
WINDOW: 0 LB
AZT : OFF
STABLE: 1 DIV
STABLE: 1.0 SEC
RS232 :
BAUD : 9600
DATA : 8
PARITY: NONE
HAND : NONE
LAYOUT: STD
ENQR : 5
AUTO : OFF
ACC.PRN: OFF
CH.NAME: OFF
FACTORY MENU
------------
FAC.SPN: 99779
FAC.ZERO: 76370
```

4 Weighing Procedures

This section covers the procedures for different weighing processes.

4.1 Weighing Fish

1. Press the **ON** key…
   The LCD Display shows *"H2 Series"* and then the current weight value is displayed.
2. Press **G/N** and access gross mode…
   Live scale weight is displayed in the **G/N** weighing mode.
3. Remove all material from the scale and press ZERO/CLEAR
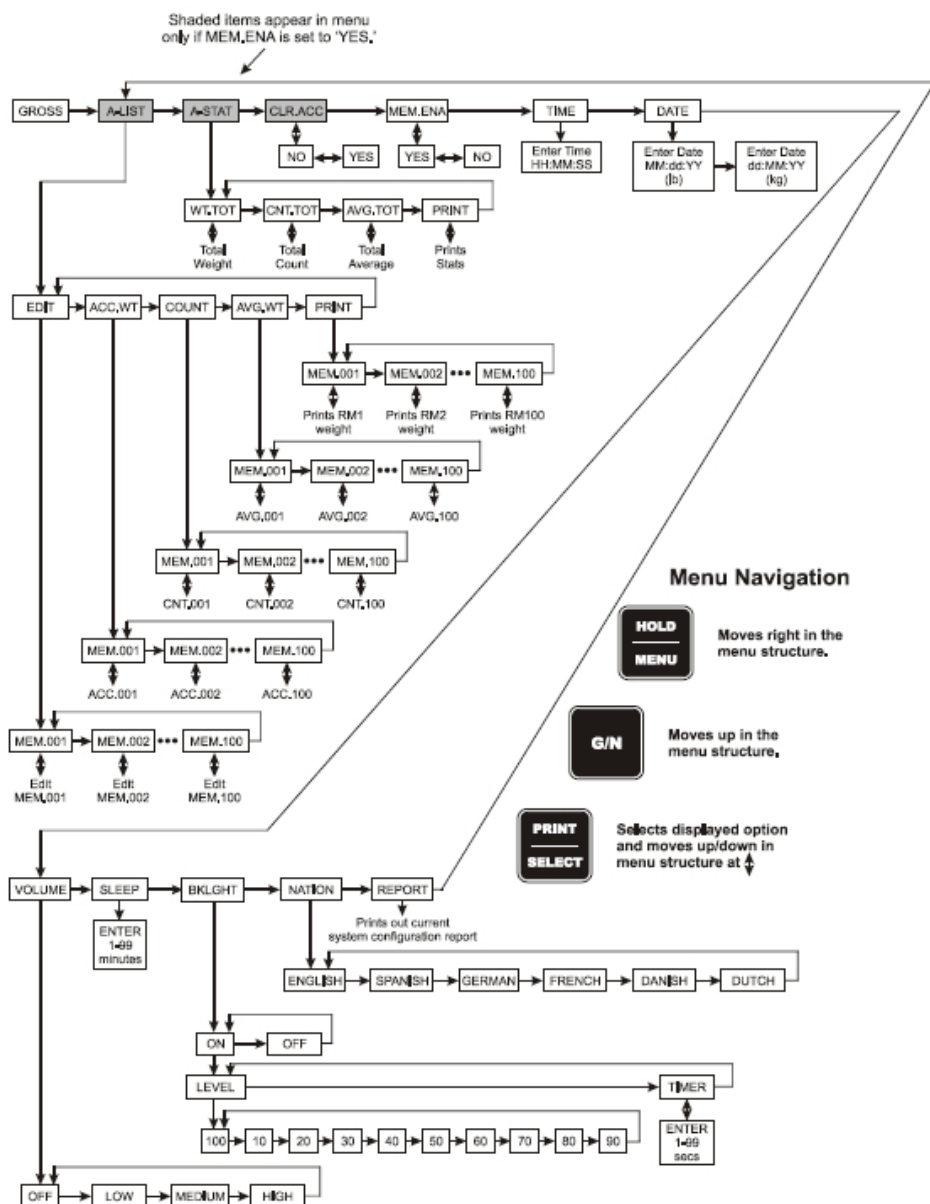   *0* is displayed, and the system is zeroed.

> *Establishing zero here is the same as doing the calibration zero.*
> *If unit is in **AUTO-LOC** mode and L is displayed, to zero the scale, press*
> *and hold the **ZERO/CLEAR** key for two seconds.*

4.2 Gross/Tare/Net (GTN) Weighing

This method of weighing allows you to subtract the weight of the container, basket, etc from the total weight.
For GTN (Gross-Tare-Net) weighing (weighing net amounts), follow these steps:

1. Press **ON**…
   Display shows *HELLO* then the current weight value is displayed.
2. Press **G/N** to access the gross mode…
   Live scale weight is displayed in the G/N weighing mode.
3. Remove all material from the scale and press **ZERO/CLEAR**
   0 is displayed, and the system is now zeroed.

> *The zero point established at this point is the same as calibration zero. If a system*
> *is set at 50.00 lb, and a user tares at 7.0 lb, then the system can only allow another*
> *43 lb before displaying (- - - - - -) upper dash lines for overcapacity.*
> *If no tare weight has been established, push G/N key to show NO TARE.*

4. Place the basket or container to be tared on the scale…
   Weight of container is displayed.
5. Press the **TARE** key to tare the weight from the display…
   0 weight is displayed and the *Net* annunciator lights up
6. Place the material to be weighed on the scale…
   Net weight is displayed. (This is the weight of the fish)
7. Remove the weighed material from the scale (leaving the tared item).
8. Repeat steps 6 through 7 for each angler using the same tare weight.
9. To remove the tare weight, press the G/N key to return to gross weigh mode, then press the **ZERO/CLEAR** key…

4.6 Flow Chart of User Menu

Below is a flow chart that shows how the internal menu structure is organized in the **H2** indicator.

Shaded items appear in menu only if MEM.ENA is set to 'YES.'

Menu Navigation

HOLD / MENU — Moves right in the menu structure.

G/N — Moves up in the menu structure.

PRINT / SELECT — Selects displayed option and moves up/down in menu structure at ⇕

4.6 Manual Hold Feature

This feature will be incorporated in future applications and currently serves no useful function.

4.8 Weighing Fish with AUTO-LOC®

Auto-Loc® by ProTournament Scales is a feature that will "lock" the weight of the fish onto the display screen until the weight is removed. Once the "L" is displayed on the LCD screen, the weigh-master can announce the weight and not be concerned about the weight changing due to moving fish or wind.

The following describes how a H2 Indicator Auto-Loc® feature works.......

1. Turn indicator on, press the **G/N** key to access the gross mode and press the **ZERO** key…
   0.00 is displayed.
2. Place the fish onto the scale…
   L xx.xx is shown (The L indicates the weight is locked on)
   xx.xx = fish auto-locked weight
   If a false locked weight occurred, press the **ZERO/CLEAR**key to recheck the fish weight. This will also delete from the accumulators the last locked-on weight and replace it with the new locked-on weight. Weight stays locked until the weight on the scale drops by the programmed release tolerance. (Example: weighing a 10.00 lb fish with a 50% release tolerance, means the lock will release when weight drops below 5.00 lb).
3. Remove the fish from the scale…
   Scale returns to live weighing mode
4. Repeat steps 2 and 3.

5 Test Menu

Press the following sequence of keys to enter the password (111) and enter the indicator "Test Mode"

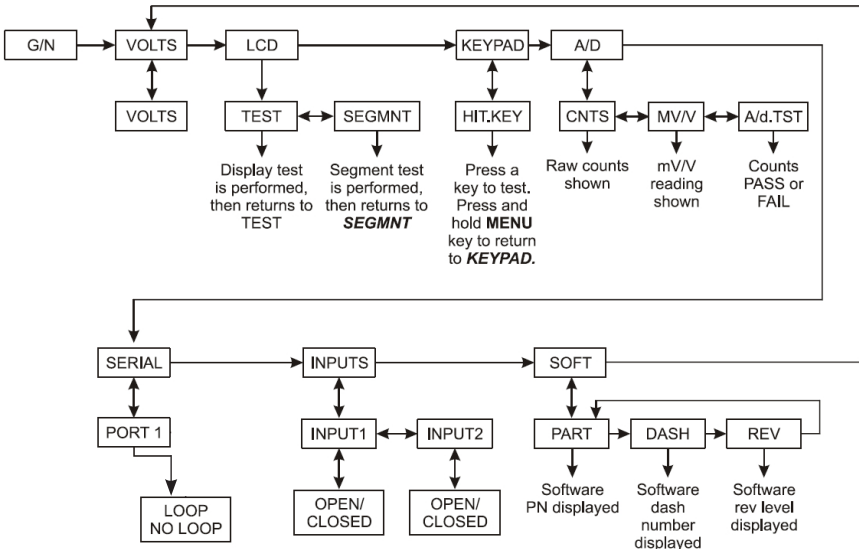*When in normal weighing mode, press and hold menu button for 3 seconds.*

| HOLD MENU | `SETPAS` |

| RECALL ▲ | RECALL ▲ | HOLD MENU | RECALL ▲ | RECALL ▲ | HOLD MENU | RECALL ▲ | RECALL ▲ | HOLD MENU | PRINT SELECT |

`I`   `II`   `III`   `VOLTS`
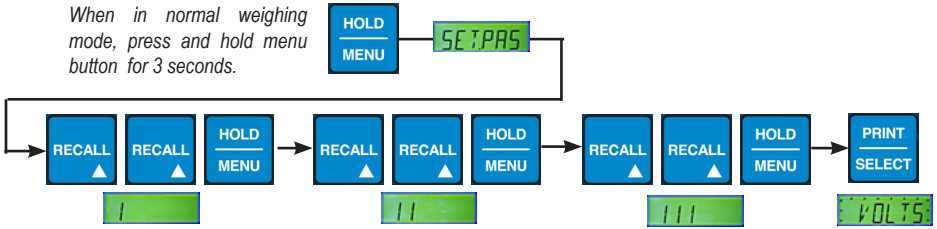
(To exit Test Mode, continue pressing G/N key until indicator is back in normal weighing mode. 0.00)

5.1 Test Menu Summary

`VOLTS` — `LCd` — `KEYPAd` — `A/d` — `SERIAL` — `INPUTS` — `SOFT`

HOLD MENU
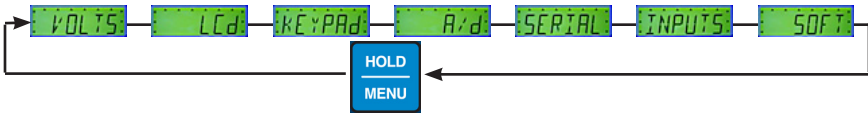
VOLTS	Display the input voltage to the indicator
LCD	Do a LCD display test
KEYPAD	Do a keypad test
A / D	Analog Data (factory use only)
SERIAL	Check the serial ports (Port 1) *(not used with radio)*
INPUTS	Check the inputs *(for future features)*
SOFT	Display software version

G/N → VOLTS ↔ LCD → KEYPAD → A/D

VOLTS | TEST ↔ SEGMNT | HIT.KEY | CNTS ↔ MV/V ↔ A/d.TST

Display test is performed, then returns to TEST

Segment test is performed, then returns to **SEGMNT**

Press a key to test. Press and hold **MENU** key to return to **KEYPAD.**

Raw counts shown

mV/V reading shown

Counts PASS or FAIL

SERIAL → INPUTS → SOFT

PORT 1 | INPUT1 ↔ INPUT2 | PART ↔ DASH ↔ REV

LOOP NO LOOP

OPEN/ CLOSED

OPEN/ CLOSED

Software PN displayed

Software dash number displayed

Software rev level displayed

5.3 Test Menu Items

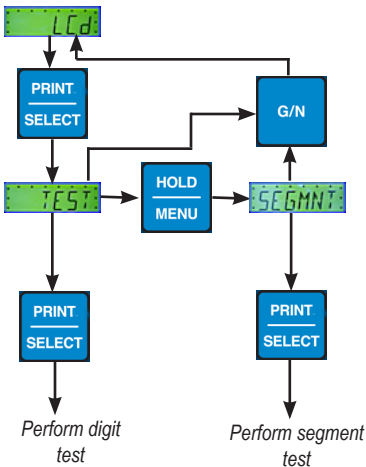## 5.3.1 VOLTS (Input voltage test)
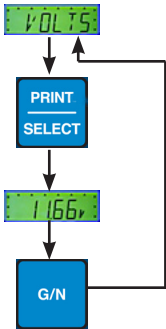
This allows the user to check the voltage supplied to the indicator and verify proper power supply levels. (minimum operating voltage is 10.0 volts)

Pressing the **G/N** key will return to test functions menu.

5.3.2 LCD (LCD Display test)

Perform digit test

Perform segment test

1. From *VOLTS* press **MENU**…
   LCd is displayed.
2. Press the **PRINT/SELECT** key…
   TEST is shown.
3. Press the **PRINT/SELECT** key…
   Display performs a test (15 sec).
4. When test is completed…
   TEST is shown.
5. Press **HOLD/MENU**…
   SEGMNT is displayed.
6. Press the **PRINT/SELECT** key…
   Display performs a segment test.
7. When test is completed…
   SEGMNT is displayed.
8. Press **G/N** key to…
   Return to *LCd* display.
9. Press **G/N** key to return to the G/N weighing mode.

5.3.3 KEYPAD (Keypad test)
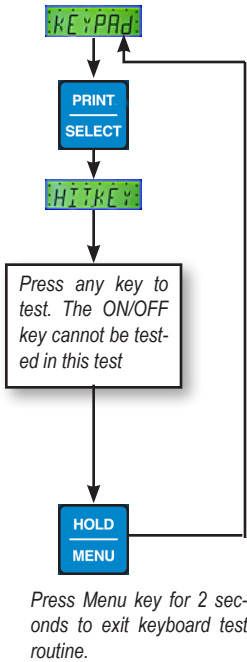
This test allows testing of all keys…
1. From *VOLTS*, press the **HOLD/MENU** key…
   LCd is displayed.
2. Press the **HOLD/MENU** key repeatedly until…
   KEYPAd is shown.
3. Press the **PRINT/SELECT** key…
   HIT.KEY is displayed briefly, then *NO KEY* is
   shown if a key isn't being pressed. Test the key by
   pressing it. If it is working the corresponding
   key name will be displayed. See table below:
   Press the **G/N** key *G/N* is displayed.
   Press the **HOLD/MENU** key *HOLD* is displayed.
   Press the **ZERO/CLEAR** key *ZERO* is displayed.
   Press the **PRINT/SELECT** key *PRINT* is displayed.
   Press the **RECALL** key *RM* is displayed.
   Press the **SAVE** key *M+* is displayed.
4. Press and hold the **HOLD/MENU** key to return to
   KEYPAD.

Press any key to test. The ON/OFF key cannot be tested in this test

Press Menu key for 2 seconds to exit keyboard test routine.

5.3.4 A/D (Factory use only)

1. This is for factory setup when installing different weigh platforms and provides data that is of no use to the user.

5.3.5 SERIAL (Serial Port Test)
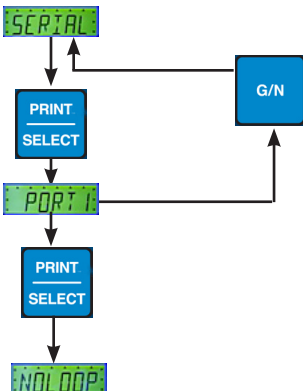
This test cannot be performed with the radio transmitter installed. If performed the system will display *NOLOOP* since the Rx and Tx lines cannot be manually connected to perform this test.

21

5.3.6 INPUT (Testing the Input)

`INPUTS`   This feature is for future enhancements and is not currently implemented.

5.3.7 SOFT (Software part number, version and revision)
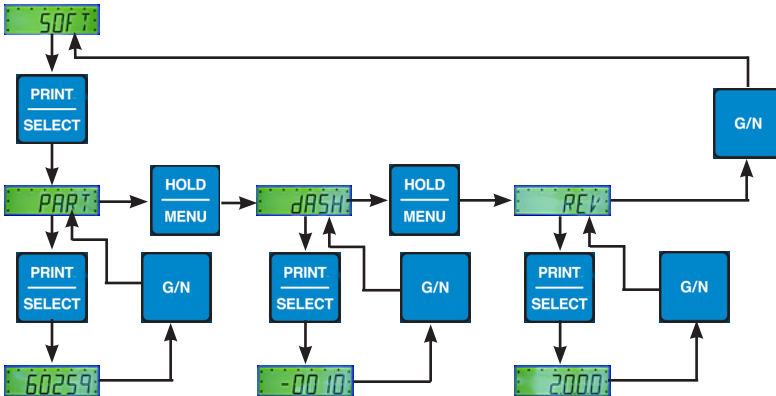
The part number of the software shown in the above example is:

P/N 60259-0010 Rev 2.0.0.0

(Your number will differ from the example above)

This concludes the section on using the Test Menu of the H2 Indicator.

9 Appendix: Troubleshooting

If problems are encountered in the operation of the **H2** weighing system, read through these troubleshooting steps and perform those that are appropriate. This information will assist in correcting any of the following situations:

- Power ON Problems on page xx
- Indicator +/- RANGE Problem on page xx
- Indicator Over or Under Capacity Problem on page xx
- Inaccurate Weight Readings on page xx
- Drifting Weight Readings on page xx
- How to Get Service Repairs on page xx

9.1 Power ON Problems

If after applying power to the indicator it does not power on, check the following items and then try to power on after each step.

1. **Check Input Voltage:** Required voltage into the indicator is 10-17 volts negative ground. If the voltage is between 9-10 volts the indicator will alternate between LOW.BAT and appropriate mode. The indicator will automatically turn off if the voltage drops below 9 volts for more than five seconds. Make sure to check the connections for corrosion, and or bent pins and reconnect the power source. Also inspect the power cable for possible damage . Again the unit can be powered directly from a 12VDC battery or the 120 VAC power transformer that was supplied with the indicator. If using a standard ProTournament battery power cable, connect the BLACK wire to Ground and the RED wire to +12VDC.

2. **Internal Fuse**: A 3.15 Amp fuse is internal on the PC board, should this fuse be open, the indicator must be returned to ProTournament Scales for replacement.

3. **Internal 3 volt coin cell battery**: The **H2** Indicator has an internal coin cell battery which provides backup power for retention of the time and date, and the 100 memory channel accumulator data. During normal operation, when power is turned off all this information is saved. After 4-5 years the coin cell battery will be drained. When this happens and the unit is turned off, the information will be lost and the indicator will no longer turn on. When this occurs, the coin cell battery must be replaced to resume normal indicator function.

9.2 Indicator +/- RANGE Problem

An over ranged indicator is represented by either +/- RANGE on the display, and is typical when the weigh table is disconnected from the indicator.Once the weigh table is plugged in, actual readings will be displayed and the indicator can be zeroed.

9.3 Indicator Over or Under Capacity Problem

This situation occurs when the input from the weigh bars or load sensors exceed the capacity of the ⊟⊇ Indicator.

1. If indicator shows either upper or lower dashes on the display, press ZERO/ CLEAR when the scale is empty to establish a zero weight readings.
2. If the unit still does not zero, then it is most likely a problem with the weigh table. Check for cable damage or connector damage. If no problems are found the table will need to be sent in for repair.

9.4 Inaccurate Weight Readings

1. Do a visual inspection of the scale system and check for:
    *   Cable damage to the load cell or the 4-pin connector
    *   Check to make sure the cable is exiting table at notched opening, if not lift off table top and orient correctly.
    *   Check for moisture or corrosion at the connector pins. If moisture is present, dry out both the female and male pins with dry compressed air (canned air used to clean computer keyboards and cameras is a good choice) or tv-tuner cleaner. If corrosion is found and cannot be cleaned then the pins will have to be replaced by the ProTournament Scales Service Center.

9.5 Drifting Weight Readings

1. If weight readings drifts this is usually caused by :
    *   moisture in the 4-pin connector
    *   corrosion in the 4-pin connector
    *   loose connection in the 4-pin connector
    *   Damaged cable that connects weigh table to indicator
2. Another possible problem is a defective load cell in the weigh table.

9.6 Loss of Data: Time & Date or Memory

The H2 Indicator has an internal coin cell battery which provides backup power for retention of the time and date, and the 100 memory channel accumulator data. During normal operation, when power is turned off all this information is saved. After 4-5 years the coin cell battery will be drained. When this happens and the unit is turned off, the information will be lost and the indicator will no longer turn on. When this occurs, you must replace the coin cell battery to resume normal indicator function. ProTournament Scales recommends that this coin cell battery be replaced every 48 months.

9.7 Scale will not zero with "L" displayed

Press and hold the Zero/Clear button for 2 seconds to zero the scale when in a weight locked condition. This would be used for example to "zero out" the weigh-in basket weight.

9.8 Sevice Center

If the indicator is defective or needs service, send the equipment prepaid to:

Service Department
ProTournament Scales
2001 North Morton Street
Franklin, IN 46131

PHONE Number:1-317-738-4474
M-F 8:00 AM – 4:00 PM (CST)
Please include:
Name and address
Date of Purchase
An informal note explaining the problem

Remote Displays

The H2 Indicator is equipped with an internal radio that broadcast the weight readings to remote displays and computer hubs manufactured by ProTournament Scales. The remote displays are setup at the factory to work with the H2 indicators. There are no user paramaters that need to be set or configured to use the remote displays. Simply power up the indicator and apply power to the remote display. The indicator and remote will automatically find each other, link up and the weight reading will appear on the remote display.

> **NOTE** regarding negative weights
>
> The remote displays are programmed to not display negative weights. This eliminates people in the crowd that dont understand tare weight, from asking why the scale is not zero when the tare (basket) is removed from the scale.
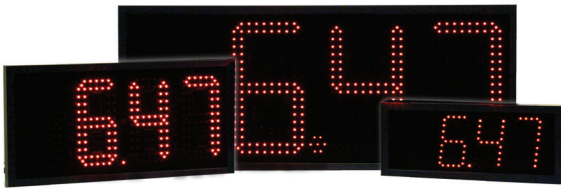
Options

ProTournament Scales offers many options that can be used with our H2 Series weighing system.

Specifications

Power- 10 - 17 VDC

Enclosure - Water and dust resistant, structural polycarbonate
5.5" H x 7.25" W x 3.9" D

Display - 6 digit LCD, 14 segment 1.1" (28 mm)
green-yellow backlight, ten adjustable brightness levels

Annunciators - lb, lb/oz, kg, auto, motion, gross and net

Time and Date - Battery backed up real time clock

Environment - -20° to 140° F / -28° to 60° C

Weight- 2.8 lb / 1.3 kg / 4.0 lb / 1.8 kg shipping weight

Battery - 14.8Volt, 2200 milli-amp hour lithium-ion recharagable battery pack
with short circuit protection.

Radio - FCC approved, internal proprietary design

Warranty - Three years

ProTournament Scales

2001 North Morton Street
Franklin, IN 46131
1-800-445-5058