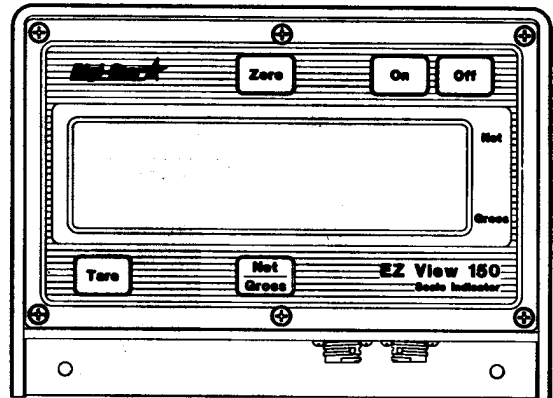
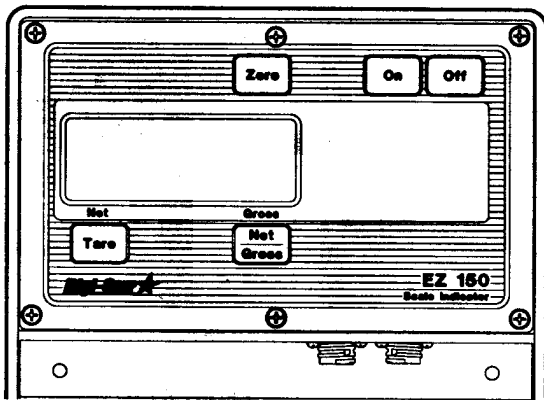


# ***Digi-Star***®

## The "EZ 150 and EZ View 150" Electronic Scale Indicators



## Operation & Installation Manual

**FEATURES:** The "EZ" Models have enhanced features such as:

- Scrolling Help Messages for EZ operation.
- Large 1" display for greater readability. (1.7" display for EZ View 150)
- Front Panel Calibration without simulator or weights.
- Fiber-optic backlighting for extremely long life.
- Optional European Compliance (CE mark) for use in the European Community

**OPERATING SPECIFICATIONS:**

Temperature Range ..... -20 to 140 degrees F  
Power Requirements ..... 10½ - 16 VDC

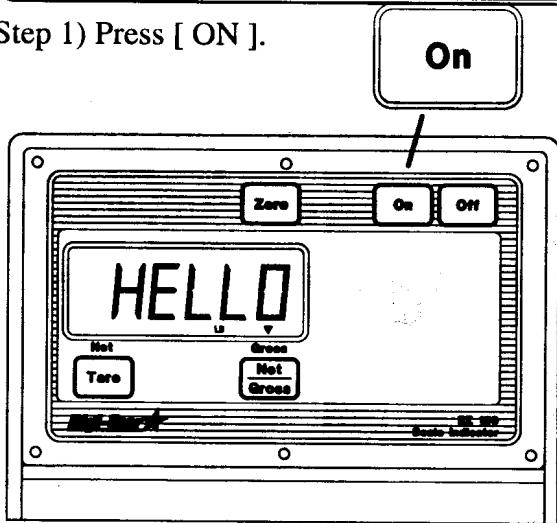
**DIGI-STAR**  
**790 WEST ROCKWELL AVENUE**  
**FORT ATKINSON, WISCONSIN 53538**  
**PHONE (920) 563-1400**  
**TECHNICAL SERVICE (920) 563-9700**

## MODEL 150 - System Operation:

EZ 150 shown—EZ View 150 operation is the same. Net and Gross annunciators on the EZ View 150 are located along right hand edge of the weight display.

### Turning ON the Scale:

Step 1) Press [ ON ].



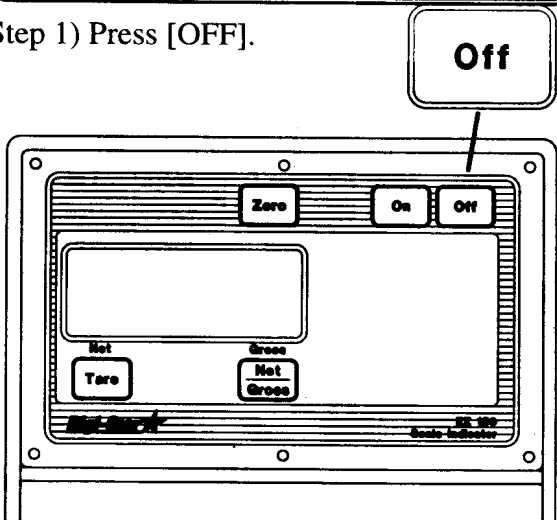
A brief message is displayed (such as "HELLO"). The scale enters GROSS weighing mode. Pressing [ON] a second time during normal system operation starts the self test.

A *warm up period* of ten to fifteen minutes provides the most accurate readings. If the scale is holding a load for a long period of time (ex: overnight), the weight displayed may vary because of *zero shift* created by changes in temperature. This does not affect the accuracy of the scale.

For example, if the system was loaded with 1000 Lbs, it might read 1200 Lbs the following day. The change in temperature "*zero shifted*" the ZERO/BALANCE from 0 Lbs to 200 Lbs. When unloading the scale, the display will count from 1200 to 200 Lbs for a total of 1000 Lbs.

### Turning OFF the Scale:

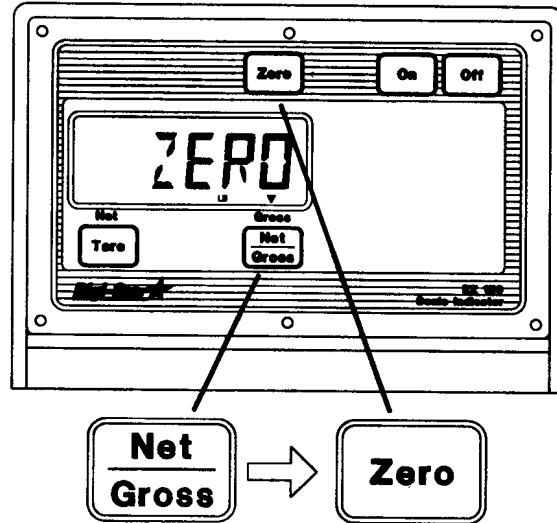
Step 1) Press [OFF].



### To Zero Balance the Scale:

Step 1) Press the [NET/GROSS] key and within three seconds,

Step 2) press the [ZERO] key.



The ZERO/BALANCE will "balance off" trailer, bin, or platform weight.

The "ZERO" message is displayed and the scale is placed in the GROSS mode.

Pressing only the [ZERO] key will cause the message "TO ZERO/BALANCE PRESS NET/GROSS - THEN ZERO" to be displayed.

If the supply power is below the "low battery threshold" (10.5 Volts), the message "INDICATOR CANNOT BE ZERO/BALANCED - LOW BATTERY VOLTAGE" is displayed. The message "LO BAT" will be periodically shown on the display (approx. every five seconds) to alert the operator of the low battery condition.

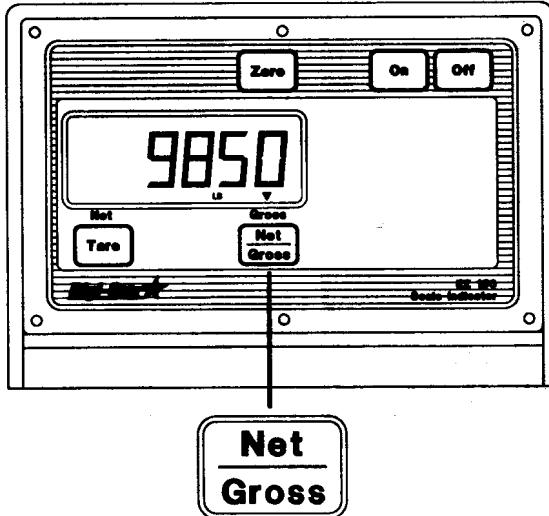
Loss of power does not affect the ZERO/BALANCE or "Setup/Calibration" values.

## MODEL 150 - System Operation:

To Select Gross Mode:

*GROSS mode displays the weight change since the unit was last ZERO/BALANCED.*

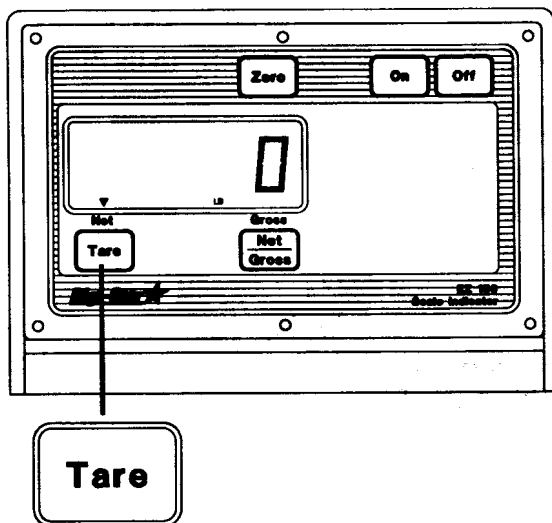
Step 1) Press [NET/GROSS].



NOTE: The scale is in GROSS mode if there is a flashing arrow pointing toward the GROSS text just above the [NET/GROSS] key.

To Select Net Mode:

*NET mode displays the weight change after a TARE has been performed. TARE is a temporary "zero" or reference point.*



Step 1) Press [TARE] to set a temporary "zero" point and enter the NET mode.

or

Step 2) If in GROSS mode, press [NET/GROSS].

The [NET/GROSS] key is an alternating action key. If the scale is in the GROSS mode, pressing the [NET/GROSS] key will place it in the NET mode. If the scale is in the NET mode, pressing the [NET/GROSS] key will place it in the GROSS mode.

If the "TARE" function has not been previously performed, the unit will stay in the GROSS mode and the message "FOR NET MODE PRESS TARE" will scroll across the display.

NOTE: The scale is in NET mode if there is a flashing arrow pointing toward the NET text just above the [TARE] key.

Animal Weighing:

The *Lock On* weigh method #4 has the ability to determine the actual weight of items *while in motion*, such as animals. Once the actual weight is displayed, the scale "*Locks On*" to the displayed weight and does not change, even if the motion never stops. A small 'L' appears on the left side of the display indicating the weight is "*Locked On*". The animal's weight must be greater than 2.5% of the scales "*capacity*" weight before the system can "*Lock On*."

In order to *break the lock*, 50% of the displayed weight must be either added or removed from the scale. The "*Locked On*" weight can be "*rechecked*" by pressing the [ZERO] key on the front panel. This breaks the "*lock*" and the scale recalculates the weight.

For more information on selecting weigh method #4, please contact Digi-Star Technical Service at (920) 563-9700 and/or request Digi-Star Technical Manual F3251.

**MODEL 150 - Installation Requirements:**

**Indicator Mounting:**

The indicator is easily attached to the Indicator Mounting Bracket by hooking the top over the plate and securing the bottom with two (2) bolts (size# 10 x 24 x 3/4") and nuts.

**Power Connection:**

**Warning!**

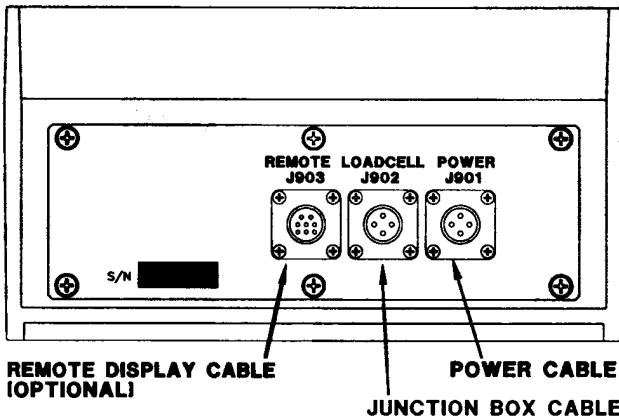
*Always disconnect the indicator power cord before "jump starting" or fast charging a battery. Disconnect all indicator leads before welding on equipment. Failure to do so can cause surges which will damage the scale.*

The power cable should be connected directly to a vehicle battery or regulated power supply. The scale end of the power cable is attached to the **J901** connector located on the bottom panel of the scale.

Connect the **RED** wire from the power cable to **+12VDC** and the **BLACK** wire to **GROUND**. The indicator is fused internally at 4 amps.

POWER CABLE CONNECTIONS	
WIRE COLOR	WIRE FUNCTION
RED	BATTERY (+12 VDC)
BLACK	GROUND
ORANGE	NA
BLUE	NA

**INDICATOR BOTTOM PANEL CABLE CONNECTIONS:**



**Load Cell Connection:**

The indicator is designed to operate with strain gage load cells. The system will normally be supplied with a "J-BOX" cable going between the indicator and the load cell junction box. Extension Kits are available from your dealer in various lengths.

To connect the load cells, attach the junction box cable to the **J902** connector on the bottom panel of the scale. Connect the load cell cables to the junction box as shown below.

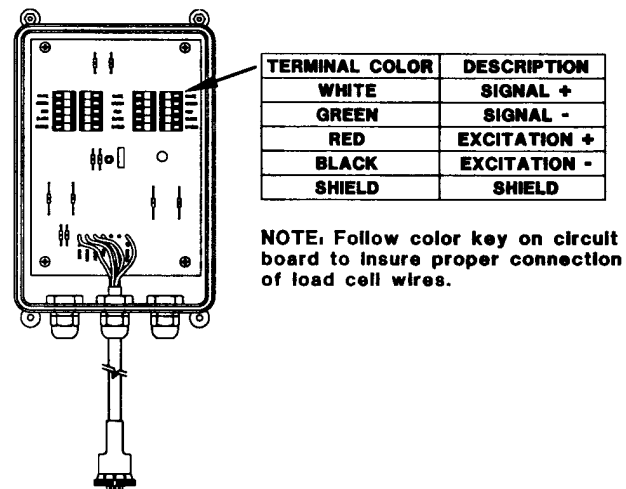
**Lightning Protection:**

Additional protection can be achieved with the proper installation of grounding rods. Please call (920) 563-9700 and request Digi-Star Form F3050.

**Technical Manual:**

Technical Manual available upon request. Please call (920) 563-9700 and request Digi-Star Manual F3251.

**JUNCTION BOX LOAD CELL CABLE CONNECTIONS:**



**MODEL 150 - Optional Features:**

**Remote Display Option:**

A Remote Display is available for viewing weights at convenient locations. The Remote Display includes a visual alarm light which can be used with the TR option listed below.

**TR Option: Radio Control**

The TR option allows the operator to remotely control the scale from a distance up to 100 feet away.

The TR option allows the operator to perform TARE and GROSS functions.

**Pulsed Output:**

The Pulsed Output option provides one (1) output line to indicate decreasing weight.

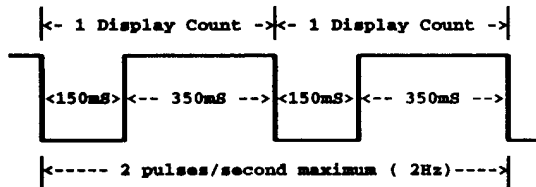
Pulsed Output pulls the connected signal line to ground through a 330 Ohm resistor for 150 milli-seconds every time the scale decreases one (1) display count.

**1 Display Count = 1 Output Pulse**

The scale will not pull the line to ground more than twice (2 times) a second - **2 Hz**. For example, if the weight decreased from 8000 lbs. to 7500 lbs. using a display count of 10 lb counts.

**8000 - 7500 = 500 (Lbs weight change)  
500 / 10 (Display Count) = 50 (Pulses)**

There would be 50 output pulses taking about 25 seconds to output all 50 pulses.



In this example, 7500 Lbs represents the "GROSS weight reference point". The scale resets the "GROSS weight reference point" if

the weight increases more than 30 display counts (300 lbs. for this example) for at least one (1) minute. The scale starts pulsing outputs as weight decreases from the new "GROSS weight reference point".

There are two (2) ways to "reset" or "abort" the internal pulse counter of the scale;

- 1 - ZERO/BALANCE the scale,
- or
- 2 - Remove the Load Cell cable from the indicator. This allows the weight to decrease. Wait 15 seconds, then re-attach the Load Cell cable. After 1 minute, the indicator will reset the GROSS weight reference point as described above.

The *Clock* option is required as part of the *Pulsed Output* option. The *Clock* records the time, date, and "GROSS weight reference point" before the power outage (blackout).

When the scale power is returned and the scale is turned back ON after a power loss, the scale will display the messages:

- 1: "POWER"
- 2: "LOSS "
- 3: " 12:00 "

Followed by the normal weight display. The "power - loss - time - weight" will continue to be displayed until any key is pressed, [NET/GROSS] for instance.