Scale Link ISO

Operators Manual



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TABLE OF CONTENTS

INTRODUCTION 4
TECHNICAL SPECIFICATIONS 4
SAFETY DURING USE 5
Cleaning 5
Charging Battery and Welding 5
SCALE LINK CONTROL OVERVIEW 6
OPERATION 7
Systems with Multiple Scales (Optional) 7
Zero Balance Indicator 7
Tare and Net/Gross 8
Print Key 9
Using the M+, RM, CM, and MS Options 10
Printing Weight from Memory 12
Weight Averaging 12
Printing Average Weight 13
OTHER FUNCTIONS 14
Hold 14
Function and Select keys 14
MENUS AND CALIBRATION 15
RE-CALIBRATING YOUR SCALE 18
Reading Too High 18
Reading Too Low 18
Get your Calibration Number 19
Change Set up and Calibration Numbers 19

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INTRODUCTION

This Scale Link ISO connects to an ISO Bus backbone and (virtual terminals) can communicate with the Scale Link.

TECHNICAL SPECIFICATIONS

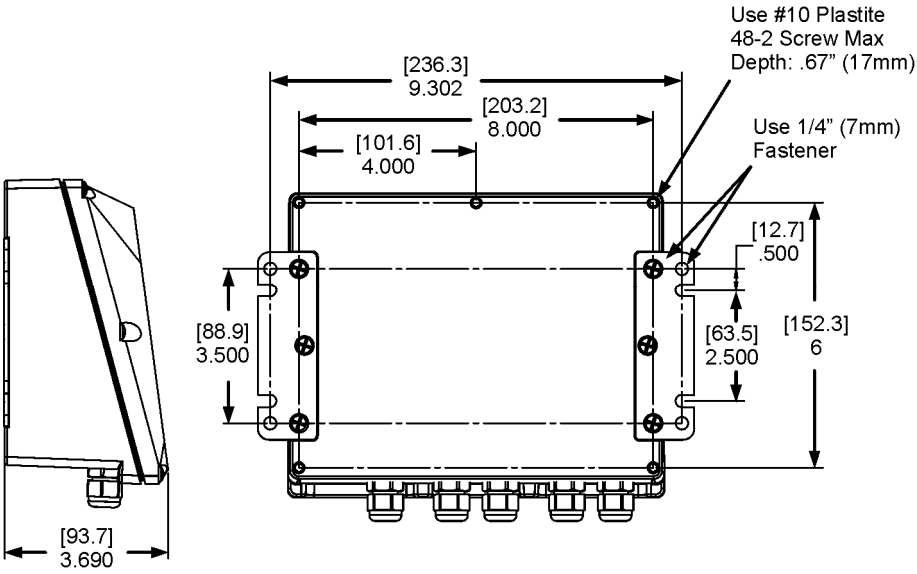
SIZE
10.25" long x 8.0" high x 4" wide (260mm x 190mm x 105mm)

WEIGHT
4.5 lbs (2.04 Kg)

ENVIRONMENTAL ENCLOSURE
IP65, IEC 529

OPERATING TEMP
-29°C to 60°C -20°F to 140°F

POWER REQUIREMENTS
Power provided by ISO Bus
10.5 to 16.0 VDC
250mA with four 350Ω load cell
400mA with radio and four 350Ω load cell



SAFETY DURING USE



Caution

Cleaning

Do not use running water (high pressure cleaners, hoses) to clean the indicator or the Scale Link.

Charging Battery and Welding

Disconnect all cables from the Scale Link and load cells before charging the battery or welding on the machine. If cables are left connected, the weighing indicator and connected load cells could be damaged.

SCALE LINK CONTROL OVERVIEW



① – press to zero balance indicator.

② – holds displayed weight; press to release.

③ – enter key.

④ – menu key.

⑤ – setup key.

⑥ – temporary zero (Net Mode).

⑦ – toggles between Net and Gross weights.

⑧ – records to memory or prints displayed weight.

⑨ – performs task displayed by select.

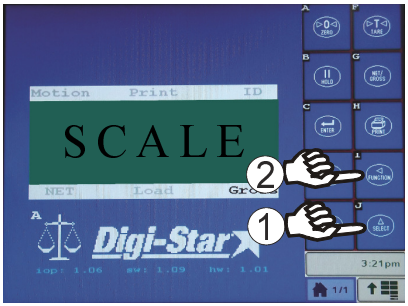
⑩ – displays additional tasks.

OPERATION

Power to the (SLC 2400 is provided from the Scale Link 100, 200 or 300. The on and off switch on the front panel of the SLC 2400 cannot turn power on or off.

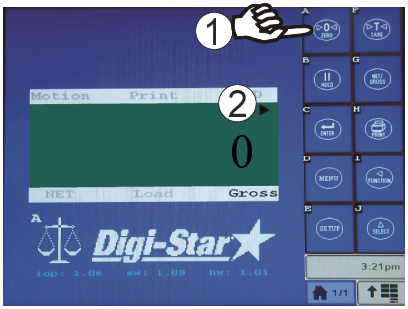
Systems with Multiple Scales (Optional)

Some Scale Link systems have two or three separate scales combined into one system. Use the following procedure to display the scale of your choice.



1. Repeatedly press SELECT until SCALE appears on the display.
2. Press FUNCTION to increment through the available scales on the system.

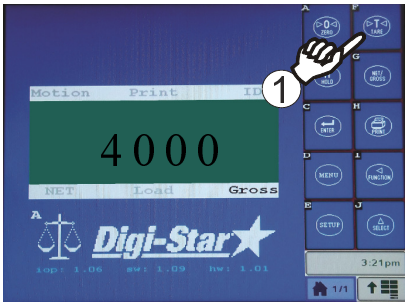
Zero Balance Indicator



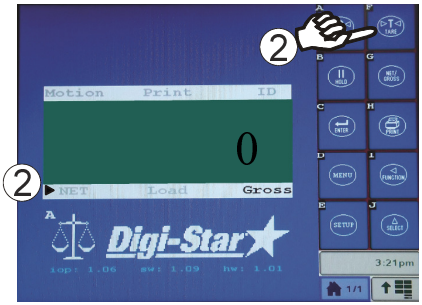
1. Press ZERO to zero balance indicator.
2. Gross is shown.

Tare and Net/Gross

Tare is a temporary zero (Net Weight) to display total weight (Gross Weight) Press NET/GROSS .



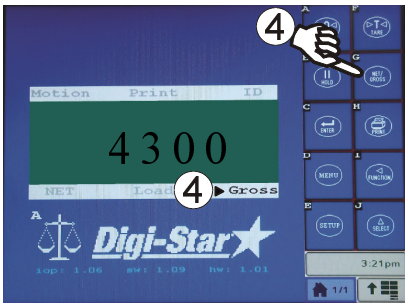
1. Weight displayed, press TARE sets zero weight.



2. Pressing TARE displays zero weight and NET is shown.



3. Add more weight.



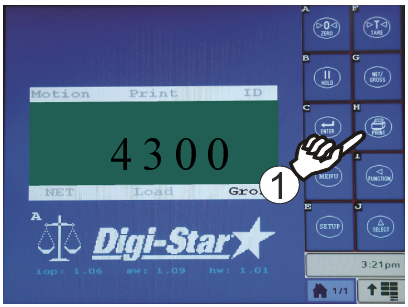
4. To know total of original weight of 4000 pounds plus added 300 pounds, press NET/GROSS to show 4300 pounds, GROSS is shown.



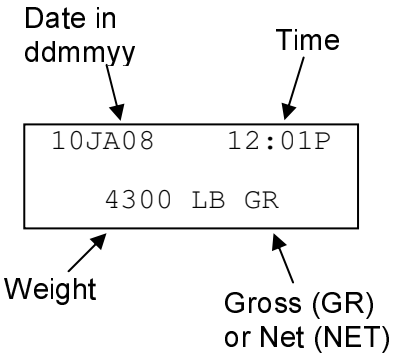
5. Press NET/GROSS 300 pounds is displayed, NET is shown.

Print Key

Note: *Optional serial port must be installed on Scale Link for printing.*



1. Press PRINT. Scale Link sends data to printer or PC.

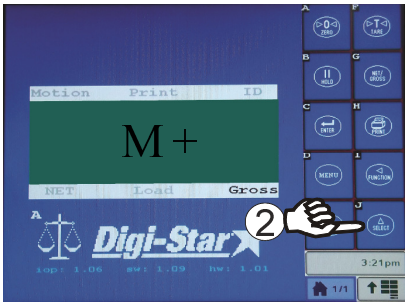


Using the M+, RM, CM, and MS Options

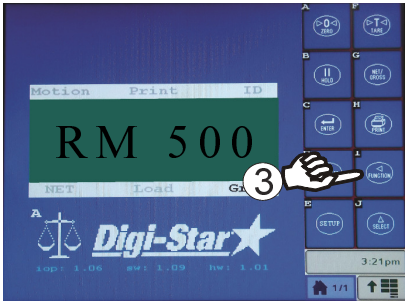
Use these options to weigh truck or wagon one axle at a time.



1. Add weight on scale. Example: 500 pounds.



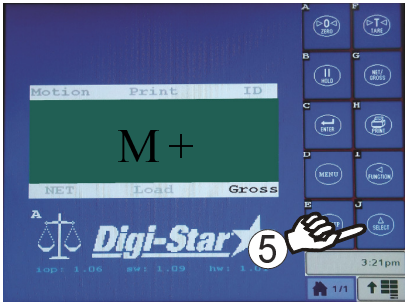
2. Repeatedly press SELECT until M+ is displayed.



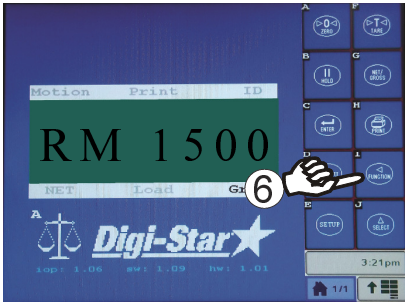
3. Press FUNCTION 500 pounds and RM briefly displayed. 500 pounds added to scale memory and scale in gross weight mode.



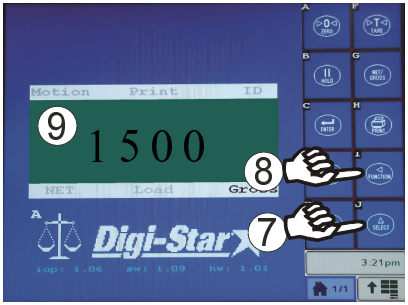
4. Put another weight on scale. Example: 1000 pounds.



5. Repeatedly press SELECT until M+ is displayed.



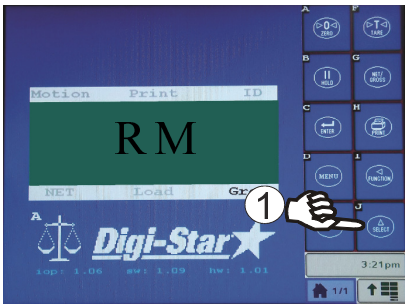
6. Press FUNCTION scale adds 1000 pounds to 500 pounds in memory and RM flashes.



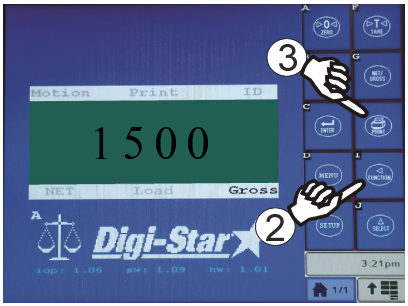
7. Repeatedly press SELECT until RM is displayed.
8. Press FUNCTION.
9. Total of both weights,1500 pounds, display, scale switches to gross weight mode.

Printing Weight from Memory

Indicator must have optional printer port for printing.

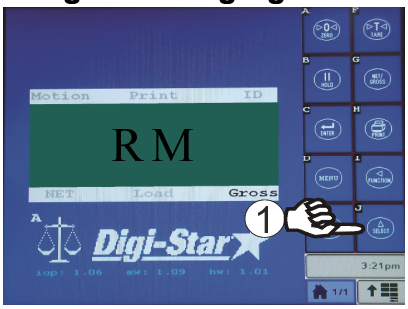


1. Repeatedly press SELECT until RM displayed.

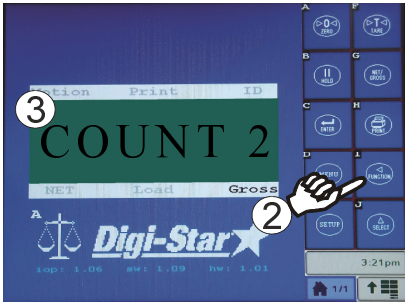


2. Press FUNCTION shows weight in memory. Example: 1500 pounds.
3. Press PRINT while weight displayed.

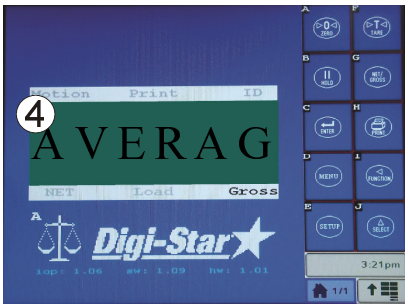
Weight Averaging



1. Repeatedly press SELECT until RM is displayed.



2. Press FUNCTION twice within three seconds performs weight average.
3. Display shows COUNT 2 if number of individual weights to average is two. Example weight of 1000 pounds and 500 pounds averaged.



4. Displays AVERAG.



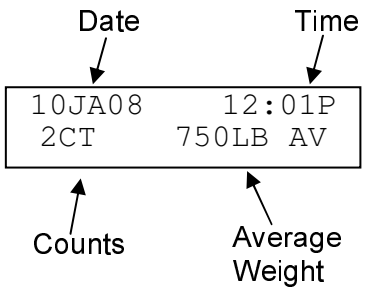
5. Display shows average of two weights in memory. After displaying average weight, scale returns to gross weight mode.

Printing Average Weight



1. Press PRINT while average weight is displayed.

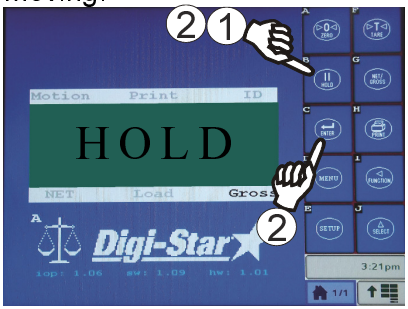
Sample output format shown below:



OTHER FUNCTIONS

Hold

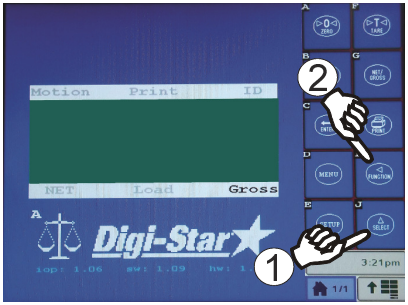
Hold mode prevents displayed weight from changing while moving.



1. Press HOLD.
2. Press HOLD indicator normal.

If weight added in hold mode, press ENTER to cancel hold.

Function and Select keys



1. Repeatedly press SELECT to view following options:

   M+: Adding weigh to weight memory
   RM: Recall weight memory
   CM: Clear weight memory
   Menu: View menus 1,2,3,4 and calibrate. See page 15.
   Setup: Change setup and calibration numbers. See page 19.
   Test: Executes self test.
   Help: Explains operation of select and function key

2. Desired option displayed, press FUNCTION to activate.

MENUS AND CALIBRATION

Options changed by user. To display menus 1,2,3,4 and calibrate:

1. Repeatedly press (SELECT) until MENU is displayed.
2. Press (FUNCTION).
3. Repeatedly press (SELECT) selects Menu 1,2,3,4 or calibrate.
4. Press (ENTER) displays setting name and allows value changes.
5. Press (NET/GROSS) selects options for each setting/display.
6. Press (ENTER) saves setting and next option for menu displays.

SETTING [display]	D.A.N NO.	OPTIONS [displayed] BOLD=DEFAULT		DESCRIPTION
MENU 1. BASIC FEATURES IN MOST INDICATORS				
LANGUAGE *(LANGAG)*	101	**English** Dutch French German Italian Portuguese Spanish Danish Hungarian Spanish	*(ENGLSH)* *(NEDERL)* *(FRANCS)* *(DEUTSH)* *(ITAL)* *(PORT)* *(ESPAN)* *(DANSK)* *(MAGYAR)* *(VESTA)*	Select language to be displayed.
DISPLAY RATE *(D RATE)*	102	1,**2**,3,4		Update display times per second.
ZERO TRACK *(ZTRACK)*	104	ON/**OFF**		If ON -zero track adjust balance for build up of snow & mud.
WEIGH METHOD *(W MTHD)*	105	1=General, 2=Fast, 3=Slow, 4=Lock-On		Select weigh method
SCALE ID SETUP *(SCALID)*	108	NEW EZ		Identity of scale location (truck id or Mixer number).
1 PRESS ZERO *(1 ZERO)*	115	ON/**OFF**		If ON -press and hold Zero key to Zero/Balance scale.
MENU 2. CLOCK, PRINTER, COMMUNICATIONS FEATURES				
TIME FORMAT *(TIME F)*	201	24 HR AM/PM		Select time format -AM/PM or 24 hour

SETTING [display]	D.A.N NO.	OPTIONS [displayed] BOLD=DEFAULT	DESCRIPTION
1 TIME *(TIME)*	202	XX:XX:XX	Select key changes time, function key chooses hh:mm:ss.
DATE FORMAT *(DATE F)*	203	1-mm-dd 2-mm/dd/yy 3-mm/dd/yyyy 4-dd-mm 5-dd/mm/yy 6-dd/mm/yyyy 7-ddmoyy 8-ddmoyyyy.	Select date format
DATE *(DATE)*	204	Enter XXXXXX	Select key changes date - function key chooses mm/dd/yy .
TARE AUTO PRINT *(TAREAP)*	211	ON/**OFF**	If ON -tare auto-prints displayed weight.
ONE LINE PRINT *(1L PRT)*	212	ON/**OFF**	If ON -scale data prints on one line.
AUTO PRINT *(APRINT)*	214	ON/**OFF**	If ON -pressing keys auto-prints weight values.
PRINT FORMAT *(PRTFMT)*	216	AUTO WTONLY DOWNLD DT+TM ID+TM IDWTTM ANIMAL 3200-A 3200-B 32-TMR DATCH1 FDINFO WTRCTM EIDINF EID EIDVID	Select alternate & comma (CSV) formats.
REMOTE *(REMOTE)*	218	**ON**/OFF	If ON scale communicates with cab control display
ZERO OUTPUT	219		Perform Zero/Balance for

SETTING [display]	D.A.N NO.	OPTIONS [displayed] BOLD=DEFAULT	DESCRIPTION
[ZEROUT]			SCOREM #11 weight output and analog output (4-20mA)
SCALE NUMBER [SCL NO]	231		Select scale number for cab control communication
REMOTE DISPLAY [RMDISP]	234	EZ3MUX EZ2	Select type of remote display
ANALOG LOW WEIGHT [LOW WT]	241		Enter analog weight value to equal 4mA or 0 volts
ANALOG HIGH WEIGHT [HIGHWT]	242		Enter analog weight value to equal 20mA or 5 volts
ANALOG SELECT [ANAOUT]	243		Select 0-5V,4-20ma or 0-20ma output
MENU 3. SCALE CALIBRATION SETTINGS			
DISPLAY UNIT [LB-KG]	301	.01,.02,.05,.1,.2,.5,1,2,5, **10**,20, 50,100	Select display count size of weigh values.
CAPACITY [CAP]	303	**LB**/KG	Display pounds -lb or kilograms -kg
WM1 ADJUST 1 [WMAI-1]	304	40000	Enter MAXIMUM weight measurable on scale.
MENU 4. PRESET, BATCHING & ROTATION COUNTER FEATURES			
Does not apply to 2400 indicator			
CALIBRATION			
DEAD WEIGHT CAL [CAL]	802		Calibration method using weights
SETUP NUMBER [SETUP]	871		Quick entry method selects weigh method 1-4lbs, 5-8 kg, gain 1-9, display counts 1-9 and capacity *1000
CALIBRATION NUMBER [CAL]	872		Weight displayed at 0.4mV/V for these load cells

RE-CALIBRATING YOUR SCALE

To re-calibrate your scale and make it even more accurate, document several loads of varying sizes and measure the actual weight of all loads on a certified scale.

In this example, we are unloading six loads onto four semi-trucks.

Example:

Load A	51560
Load B	33240
Load C	17620
Load D	50420
Load E	38200
Load F	12360
Total Indicator Weight	**203400**
Truckload #1	51920
Truckload #2	51320
Truckload #3	50720
Truckload #4	51070
Total Certified Weight	**205030**

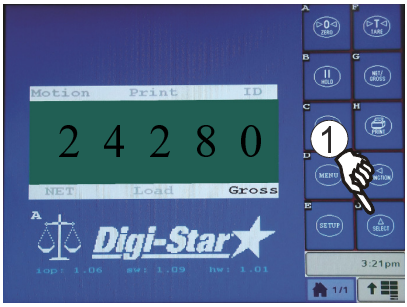
Reading Too High

If the Indicator is reading higher than the certified scale, then the calibration number is high and should be decreased proportionally. See page 19.

Reading Too Low

If the Indicator is reading lower than the certified scale, then the calibration number is low and should be increased proportionally. See page 19.

Get your Calibration Number



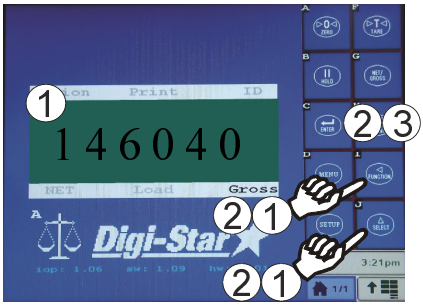
1. Press (SETUP) to enter Setup and Calibration menu. Setup number will be displayed.

TOTAL CERTIFIED WEIGHT / TOTAL INDICATOR WEIGHT X CURRENT CAL NUMBER=NEW CAL NUMBER

Using the previous example your results would be:

$$\frac{205030}{203400} \text{ X } 24280 = 24475$$

Change Set up and Calibration Numbers



1. Six digit setup number displayed. Change number, press (FUNCTION) moves flashing position left. Press (SELECT) changes number.
2. Press (ENTER) stores setup number. Indicator displays CAL, change number by pressing (SELECT) and (FUNCTION).
3. Press (ENTER) to exit.