



Scale Link ISO

Operators Manual



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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)

OPERATING TEMP

-29°C to 60°C -20°F to 140°F

WEIGHT

4.5 lbs (2.04 Kg)

POWER REQUIREMENTS

Power provided by ISO Bus

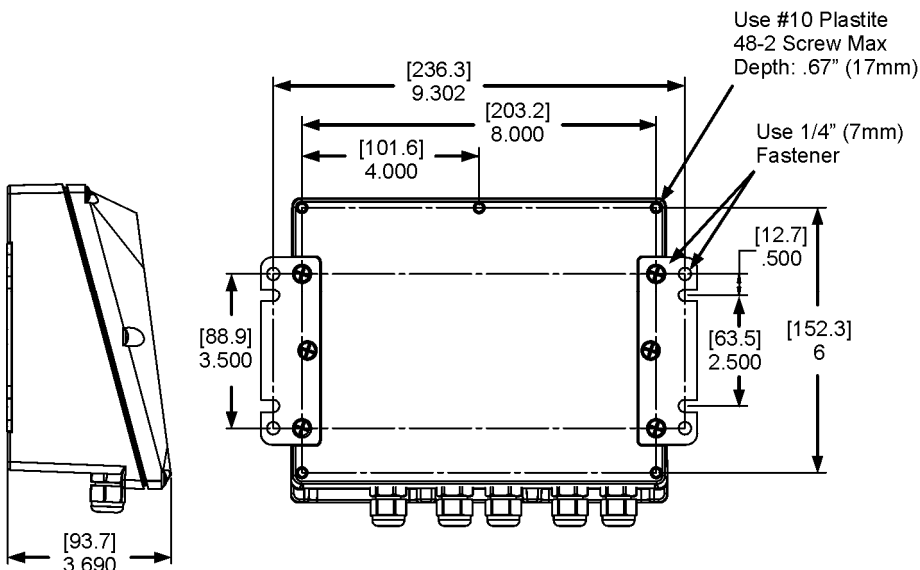
10.5 to 16.0 VDC

250mA with four 350Ω load cell

400mA with radio and four 350Ω
load cell

ENVIRONMENTAL ENCLOSURE

IP65, IEC 529



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



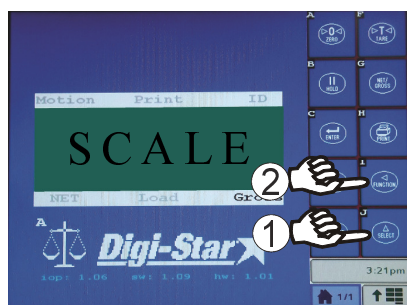
- ①  – press to zero balance indicator.
- ②  – holds displayed weight; press to release.
- ③  – enter key.
- ④  – menu key.
- ⑤  – setup key.
- ⑥  – temporary zero (Net Mode).
- ⑦  – toggles between Net and Gross weights.
- ⑧  – records to memory or prints displayed weight.
- ⑨  – performs task displayed 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  until SCALE appears on the display.
2. Press  to increment through the available scales on the system.

Zero Balance Indicator



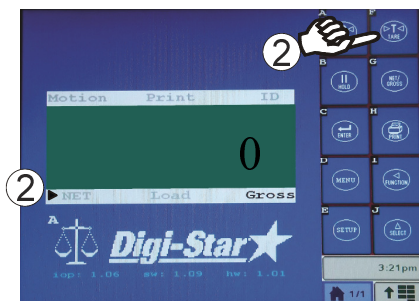
1. Press  to zero balance indicator.
2. Gross is shown.

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.



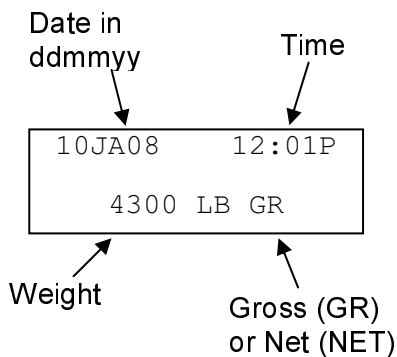
5. Press **NET/GROSS** 300 pounds is displayed, NET is shown.

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.

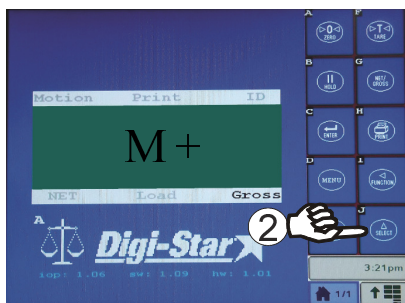



Using the M+, RM, CM, and MS Options

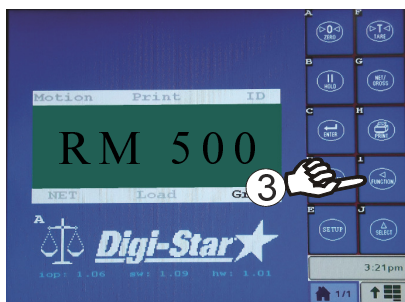
Use these options to weigh truck or wagon one axle at a time.




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



2. Repeatedly press  until M+ is displayed.



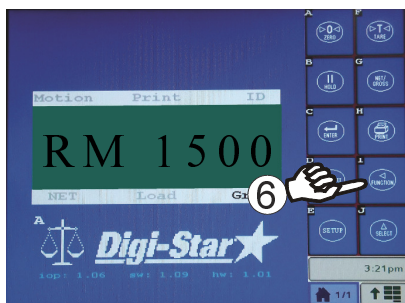
3. Press  500 pounds and RM briefly displayed. 500 pounds added to scale memory and scale in gross weight mode.




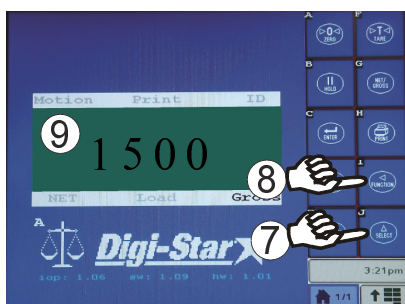
4. Put another weight on scale.
Example: 1000 pounds.





5. Repeatedly press  until M+ is displayed.



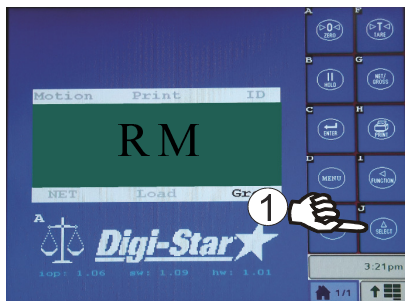
6. Press  scale adds 1000 pounds to 500 pounds in memory and RM flashes.




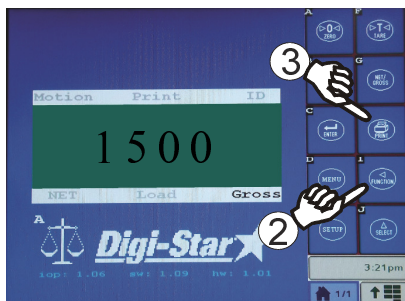
7. Repeatedly press  until RM is displayed.
8. Press .
9. Total of both weights, 1500 pounds, display, scale switches to gross weight mode.



Printing Weight from Memory

Indicator must have optional printer port for printing.

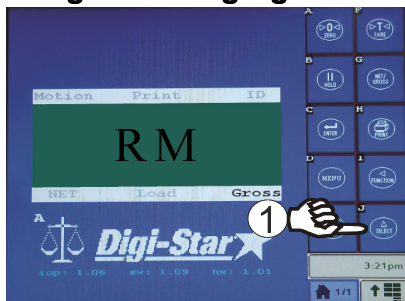


1. Repeatedly press  until RM displayed.

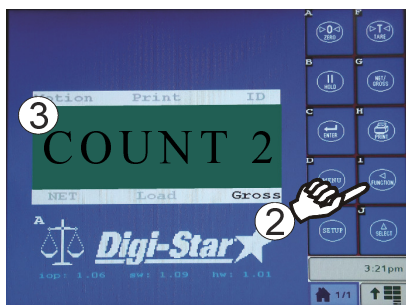


2. Press  shows weight in memory. Example: 1500 pounds.
3. Press  while weight displayed.

Weight Averaging



1. Repeatedly press  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.

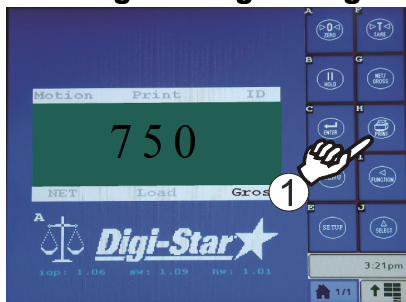


4. Displays AVERAG.



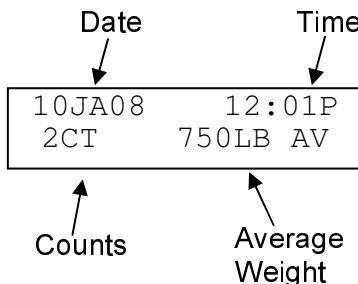
5. Display shows average of two weights in memory. After displaying average weight, scale returns to gross weight mode.

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.

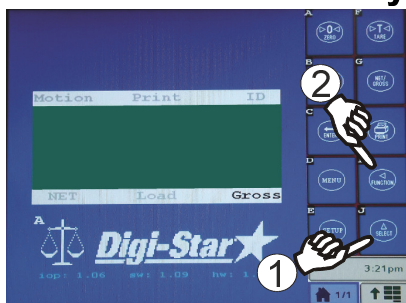



1. Press .

2. Press  indicator normal.

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

Function and Select keys



1. Repeatedly press  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  to activate.

MENUS AND CALIBRATION

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

1. Repeatedly press  until MENU is displayed.
2. Press .
3. Repeatedly press  selects Menu 1,2,3,4 or calibrate.
4. Press  displays setting name and allows value changes.
5. Press  selects options for each setting/display.
6. Press  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 (<i>LANGAG</i>)	101	English Dutch French German Italian Portuguese Spanish Danish Hungarian Spanish	(<i>ENGLISH</i>) (<i>NEDERL</i>) (<i>FRANCS</i>) (<i>DEUTSH</i>) (<i>ITAL</i>) (<i>PORT</i>) (<i>ESPAN</i>) (<i>DANSK</i>) (<i>MAGYAR</i>) (<i>VESTA</i>)	Select language to be displayed.
DISPLAY RATE (<i>D RATE</i>)	102	1,2,3,4		Update display times per second.
ZERO TRACK (<i>ZTRACK</i>)	104	ON/OFF		If ON -zero track adjust balance for build up of snow & mud.
WEIGH METHOD (<i>W MTHD</i>)	105	1=General, 2=Fast, 3=Slow, 4=Lock-On		Select weigh method
SCALE ID SETUP (<i>SCALEID</i>)	108	NEW EZ		Identity of scale location (truck id or Mixer number).
1 PRESS ZERO (<i>I ZERO</i>)	115	ON/OFF		If ON -press and hold Zero key to Zero/Balance scale.
MENU 2. CLOCK, PRINTER, COMMUNICATIONS FEATURES				
TIME FORMAT (<i>TIME F</i>)	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 [display] 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 (ANROUT)	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 (WM1-1)	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



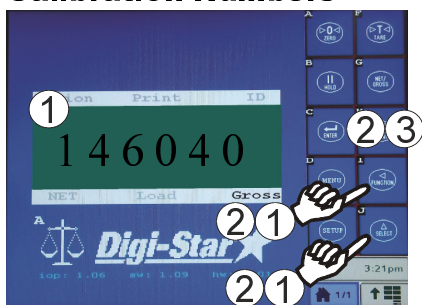
1. Press **SETUP** to enter Setup and Calibration menu. Setup number will be displayed.

$$\frac{\text{TOTAL CERTIFIED WEIGHT}}{\text{TOTAL INDICATOR WEIGHT}} \times \text{CURRENT CAL NUMBER} = \text{NEW CAL NUMBER}$$

Using the previous example your results would be:

$$\frac{205030}{203400} \times 24280 = 24475$$

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.