



Installation & Operation Manual



ONBOARD LOAD SCALE
EXTERIOR DIGITAL | AIR / SPRING SUSPENSION



Thank you for choosing to drive more and scale less! Here at Right Weigh, we are committed to making our products simple to install and easy to use. We understand that installation can vary between vehicles and yours may not be described in this manual. In any event, our technical support team is ready to answer your questions!



(503) 628-0838

(888) 818-2058 - Toll Free (USA ONLY)



support@rwls.com



www.rwls.com/how-to-calibrate-install/

IMPORTANT!

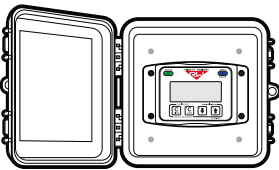
Please read instructions COMPLETELY and thoroughly before installation. Right Weigh, Inc. is not responsible or liable for any negative consequences as a result of improper installation or operation including, but not limited to, product failure or damage that could affect the integrity of the vehicle.

The installation steps in this manual are for the sole use of trained installers. Right Weigh, Inc. accepts no responsibility or liability for issues involving, but not limited to, incorrect installation that occur from misinterpretation of the steps outlined in this document.

It is the end user's responsibility to be aware of vehicle manufacturer policies before making modifications to the vehicle. Right Weigh, Inc. is not liable or responsible for issues regarding, but not limited to, warranties with other manufacturers. This is the responsibility of the end user.

For a more detailed explanation of the the warranty and liability of Right Weigh, Inc. please refer to the "Warranty Statement" and "Return Policy & Repairs" section of this document and www.rwls.com/warranty.

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ONBOARD LOAD SCALE

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Right Weigh Load Scales App:



Scan here to **download** the "Right Weigh Load Scales" App directly from the App store



Scan here for **instructions** about how to connect to your scale(s) and use the app along with a video tutorial

Technical Specifications:

Operating Temperature: -22° F to +185° F (-30° C to +85° C)

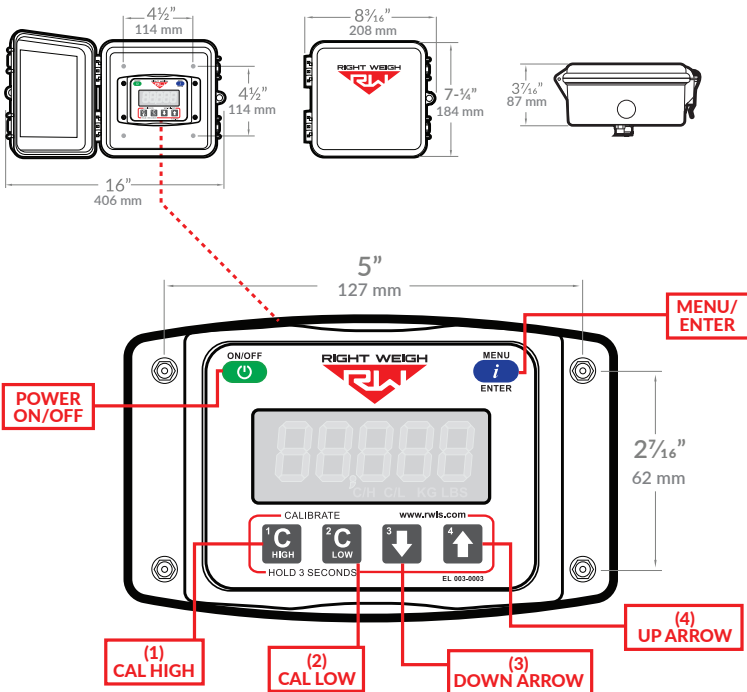
Storage Temperature: -40° F to +185° F (-40° C to +85° C)

Power Requirement: 9 VDC to 32 VDC (Switched)

Units: Pounds (LBS) or Kilograms (KG)

Housing: High impact polycarbonate blend

Display: 0.8" LCD sunlight readable



SCALE INSTALLATION & ELECTRICAL CONNECTIONS

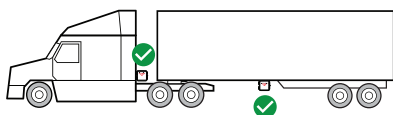
1 INSTALL STRAIN SENSOR(S)

Follow the steps on the 218-SK or 221-SK Installation manual(s) to install all strain sensors onto the vehicle.

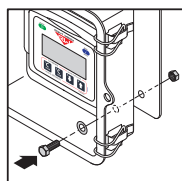
2 CHOOSE LOCATION

The 201 series scale is designed to be mounted on the outside of a truck or trailer, however it must still be mounted in a protective enclosure. A protective box and mounting bracket are included with the 201 scale.

Be sure to choose a location that is easily accessible and safe from potential damage (forklift posts, tire caps, etc.)



Mount the bracket in the chosen location and install the gauge box to the bracket using supplied hardware.



DO NOT mount the scale directly to the chassis or any other main beam unless it is approved by the vehicle manufacturer. Doing so may void the warranty with the vehicle manufacturer.



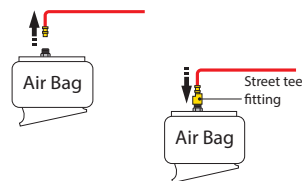
Make sure to use BOTH supplied mounting bolts to secure the bracket to the vehicle. Using only one bolt can result in a cracked bracket and the scale falling off the vehicle.

3 DUMP AIR FROM SUSPENSION SYSTEM

4 INSTALL NEW STREET TEE FITTING

Remove the suspension air line fitting from the top of one of the air bags.

Insert a street tee fitting into the top of the air bag that matches the thread size of the vehicle suspension. Reinstall the suspension air line and fitting into the street tee. For more information on the parts needed for air line installation, see Appendix A.



5 INSTALL NEW 1/4" AIR LINE

Install a new 1/4" air line and fitting into the remaining port on the tee.

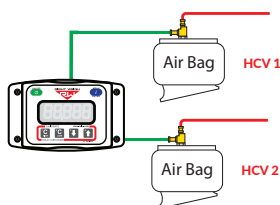


6 ROUTE AIR LINE TO GAUGE

Route the new 1/4" air line from the tee fitting assembly to the gauge. Secure air line with zip ties. Insert the air line into the push-to-connect fitting on the back of the gauge. DO NOT ROTATE THE AIR FITTING!

7 REPEAT FOR SECOND HCV (2 air sensor models only)

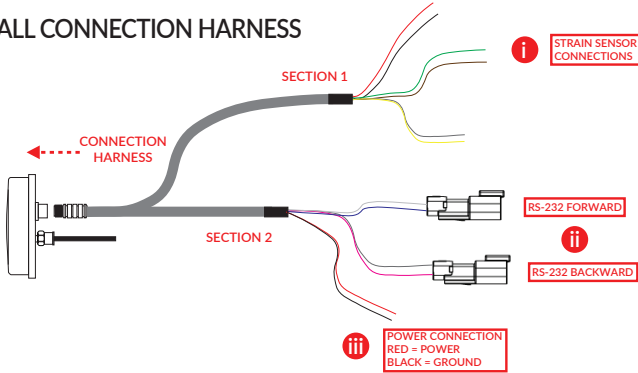
For 201-217-32 installations, repeat steps 3-5 on an air bag attached to the second HCV.



SCALE INSTALLATION & ELECTRICAL CONNECTIONS



8 INSTALL CONNECTION HARNESS



Insert the threaded male connector on the harness onto the female connector on the back of the scale. Make sure to orient the connector properly so that the small cutout on both connectors line up. Once the connector has been pressed in, thread the collar into the scale until it is hand tight.

i STRAIN SENSOR CONNECTIONS

On section 1 of the Connection Harness (labeled on image above), there are 3 pairs of wires for 3 different strain sensor connections (check wire labels to distinguish between strain sensor A, B, and C). Use the butt connectors in the strain sensor installation kit to connect strain sensor A wires to strain sensor A on the vehicle. The polarity of the strain sensor wire connections is not important. Refer to installation overview to identify which sensor is sensor A.

Complete connection for strain sensors B and C, if applicable.

Make sure all electrical connections are properly insulated, please see Appendix B for additional instructions.

ii RS-232 FORWARD & BACKWARD CONNECTION (OPTIONAL)

This connection is for RS-232 communication (use is optional). Use the RS-232 connectors to connect the gauge to a telematics device that supports RS-232 communication. For more information about this feature, please contact Right Weigh technical support listed on page 2.

iii POWER CONNECTION

The two unterminated wires coming out of section 2 of the harness are used to power the scale. Connect the **RED** wire to a switched positive (+) power source and the **BLACK** wire to chassis ground (-). The required supply voltage must be between 9 and 32 volts DC. For more information on wiring connection and insulation, see Appendix B.



DO NOT connect directly to a battery or any constant power source, gauge should be connected to a switched source so that it can be disconnected from power when not in use. Most users connect the power to vehicle marker lights or the AUX/ABS wire.

Electrical connections **MUST** be insulated, see Appendix B for instructions.

9 SET NUMBER OF CONNECTED STRAIN SENSORS

Once the gauge is connected to power, it will automatically turn on and display "bAr -" on the screen. Set the gauge to the number of strain sensors that are connected to the gauge using the UP arrow button:

bAr 0 = 0 strain sensors

bAr 1 = 1 strain sensor

bAr 2 = 2 strain sensors

bAr 3 = 3 strain sensors

If you need to change the number of strain sensors at any point, follow these steps:



1. Turn off the scale
2. Press and hold the C HIGH button and the MENU button, press the POWER button, then release all 3
3. Use the UP arrow button to change the number of strain sensors to the number desired
4. Turn off the scale to save setting

Please note that by changing the number of strain sensors the scale recognizes, all calibration data will be LOST

SENSOR CHECKING & ADJUSTMENT



At this time, you should have the scale and all strain sensors installed onto your truck. Once this is complete, it is time to check the strain sensor value(s).



Only perform the following check and adjustment when the vehicle is empty

1 ENTER DIAGNOSTICS MENU

With the scale turned off, press and hold the MENU button and then press the ON/OFF button to power on the display. The display should power on to display the scale's firmware version number.

PRESS → [MENU] ← HOLDING



2 CHECK SENSOR VALUES

Press the MENU button three times; a four digit number will appear representing the raw output from sensor A. The value should be between 6.500 and 7.500 with the vehicle empty. If the value is not within this range, sensor must be adjusted, see step 3.



For applications with multiple sensors, hit the UP ARROW to see the values for sensors B and C.



If all sensor value(s) are between 6.500 and 7.500, no adjustment is needed. Move on to step 5

3 ADJUST STRAIN SENSOR

In this example, strain sensor A is out of range and needs to be manually adjusted to set it's value between 6.500 and 7.500.

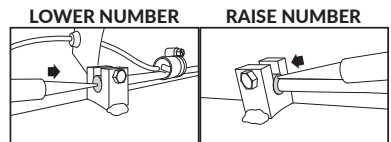


i With the gauge displaying the frequency value for the sensor that needs adjusted, remove the sheet metal cover of the corresponding strain sensor.

ii Loosen only one of the mounting block bolts. GENTLY push on the end of the tension bar with an appropriate tool to adjust the sensor's frequency value. Pushing inward will lower the number and pushing outward will raise the number.



The strain sensor values can also be viewed from the Scale Details page in the Right Weigh Load Scales app to aid in the adjustment process.



iii While holding the tension bar in position at a proper value, re-tighten the mounting block bolt and torque to 10 ft-lbs. Verify that the sensor value is still within the proper range after final torque.



4 REPEAT FOR ADDITIONAL SENSORS

For applications with multiple sensors, press the UP arrow button to view the sensor value for the next sensor. Repeat step 3 to adjust value of the next sensor if necessary. Repeat until all sensors values are set within the 6.500 to 7.500 range.

5 EXIT DIAGNOSTICS MENU

To exit the diagnostics menu, power off the display by pressing the ON/OFF button.



POWER

Turn the scale on and off to view axle group weights.

WEIGHT

Weight of the selected axle group.

AXLE GROUP INDICATOR

Indicates which axle group is being displayed. No indicator mean the gross weight is being displayed.

CALIBRATE

Press and hold C HIGH (while loaded) or C LOW (while empty) for 3 seconds to enable calibration (allows the weight number to be adjusted by using the arrow buttons), press the button again to save and exit calibration.

CALIBRATION INDICATORS

These indicate that calibration is enabled and that the weight can be adjusted using the arrow buttons. C/L indicates calibrate low enabled and C/H indicated calibrate high enabled.

MENU / ENTER

Press this button to switch between axle groups being displayed.

UNITS

Units are displayed in either pounds (lbs) or kilograms (kg)

ARROWS

Press these buttons to adjust the weight number up or down when calibration is enabled.

OPERATING MODES



Each vehicle configuration requires a specific operating mode. Operating mode availability will vary depending on the air and bar sensor configuration of the gauge (ex: St-2P will not be available for gauges with 1 air sensor configured). Please refer to the Installation Overview for bar sensor configuration and specific operating modes for your gauge configuration. The modes available on this gauge are:

- SA-AA - Straight Truck, Tractor, or Trailer; One spring suspension axle group and one air suspension axle group or lift axle
- SA-Ai - Straight Truck, Tractor, or Trailer; One spring suspension axle group and two air suspension axle groups or lift axles
- St-PA - Straight Truck with Spring Steer, Camelback or Walking Beam Drive Axle Group, and an Air Lift Pusher Axle
- St-tA - Straight Truck with Spring Steer, an Air Lift Tag Axle, and Camelback or Walking Beam Drive Axle Group
- St-2P - Straight Truck with Spring Steer, Two Air Lift Pusher Axles, and Walking Beam Drive Axle Group
- St-Pt - Straight Truck with Spring Steer, an Air Lift Pusher Axle, Walking Beam Drive Axle Group, and an Air Lift Tag Axle

See the tables on the following pages to find your vehicle configuration and set the gauge to the corresponding operating mode.



The load scale can only be setup in one operating mode at a time. If the mode is changed, the calibration data will be reset to factory defaults, requiring re-calibration.

CHANGING OPERATING MODES

1

With the scale OFF, press and hold both the UP and DOWN arrow buttons, and then press the ON/OFF button. Release all 3 buttons. The scale will display the current mode.



HOLDING



PRESS

2

Press the UP arrow button to cycle through the operating modes. To confirm your selection, turn the scale off by pressing the ON/OFF button.



The numbers on the images indicate the axle groups that will be displayed on the gauge. To cycle through the axle group on the gauge, press the MENU button.

TRAILER

VEHICLE CONFIGURATION		OPERATING MODE
	<p>Axle Group 1 - Fixed Spring Suspension Single or Tandem Axle Group</p> <p>Axle Group 2 - Air Lift Axle</p>	
	<p>Axle Group 1 - Fixed Spring Suspension Single or Tandem Axle Group</p> <p>Axle Group 2 - Front Air Lift Axle</p> <p>Axle Group 3 - Back Air Lift Axle</p>	

STRAIGHT TRUCK

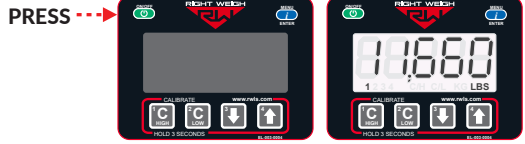
VEHICLE CONFIGURATION		OPERATING MODE
	<p>Axle Group 1 - Leaf Spring Steer</p> <p>Axle Group 2 - Air Suspension Drive Axle Group with 1 or 2 HCV</p>	
	<p>Axle Group 1 - Twin Spring Steer</p> <p>Axle Group 2 - Air Suspension Drive Axle Group with 1 or 2 HCV</p>	
	<p>Axle Group 1 - Leaf Spring Steer</p> <p>Axle Group 2 - Air Suspension Drive Axle Group with 1 HCV</p> <p>Axle Group 3 - Air Lift Axle</p>	
	<p>Axle Group 1 - Twin Spring Steer</p> <p>Axle Group 2 - Air Suspension Drive Axle Group with 1 HCV</p> <p>Axle Group 3 - Air Lift Axle</p>	
	<p>Axle Group 1 - Leaf Spring Steer</p> <p>Axle Group 2 - Air Lift Pusher Axle</p> <p>Axle Group 3 - Walking Beam or Camelback Drive Axle Group</p>	
	<p>Axle Group 1 - Leaf Spring Steer</p> <p>Axle Group 2 - Walking Beam or Camelback Drive Axle Group</p> <p>Axle Group 3 - Air Lift Tag Axle</p>	
	<p>Axle Group 1 - Leaf Spring Steer</p> <p>Axle Group 2 - Air Lift Pusher Axle</p> <p>Axle Group 3 - Air Lift Pusher Axle</p> <p>Axle Group 3 - Walking Beam Drive Axle Group</p>	
	<p>Axle Group 1 - Leaf Spring Steer</p> <p>Axle Group 2 - Air Lift Pusher Axle</p> <p>Axle Group 3 - Walking Beam Drive Axle Group</p> <p>Axle Group 4 - Air Lift Tag Axle</p>	

GAUGE OPERATION



1

Press the ON/OFF button to turn on the scale display. The small numbers at the bottom left of the screen indicate which axle group is currently being displayed. Each number corresponds with an axle group, starting with 1 at the front of the vehicle and incrementing back.



2

Press the MENU button to cycle the display to the next axle group.



3

A solid axle group indicator represents an axle group that is connected directly to the gauge.



4

No visible axle group indicator, following the brief message "GroSS", represents the gross weight screen. This is a sum of all the axle group weights.



CHANGING UNITS

With the gauge on, press and hold the UP ARROW and then press the MENU button. This will toggle the settings between pounds and kilograms.



CALIBRATION

The 201 series load scale must be calibrated both empty and loaded to work properly. The scale associates the weight you enter with the air pressure in the suspension system at the time of calibration. You will need to calibrate once while the vehicle is empty, and again while the vehicle is loaded for each axle group being monitored.



Only enter on-the-ground weight of axle or group being monitored. DO NOT use gross weight, tare weight, etc.

EMPTY CALIBRATION POINT

- 1: While the vehicle is empty, obtain axle group weights from a certified in-ground scale.
- 2: Park on a level surface. Shift the transmission to neutral and set the parking brakes. Chock the wheels to prevent unexpected vehicle movement, then release the parking and service brakes.
- 3: Make sure the Height Control Valve (HCV) has fully inflated the air bags. If needed, briefly dump the air from the suspension and allow the HCV to refill the system.



4: Press the ON/OFF button to turn on the Right Weigh load scale.



5: Press the blue MENU button to select the proper axle group or calibration set.



6: Press and hold the C LOW button until the "C/L" symbol appears.



7: Adjust the value using the UP and DOWN arrows so that it matches your scale ticket for the axle group.



8: To save, press and hold the C LOW button until the "C/L" symbol disappears.

9: Repeat steps 5-8 for all axle groups or calibration sets.

LOADED CALIBRATION POINT



Repeat "empty calibration point" steps 1-3 with the vehicle fully loaded.



4: Press the ON/OFF button to turn on the Right Weigh load scale.



5: Press the blue MENU button to select the proper axle group or calibration set.



6: Press and hold the C HIGH button until the "C/H" symbol appears.



7: Adjust the value using the UP and DOWN arrows so that it matches your scale ticket for the axle group.



8: To save, press and hold the C HIGH button until the "C/H" symbol disappears.

9: Repeat steps 5-8 for all groups or calibration sets.

RE-CALIBRATION

It is recommended to re-calibrate every 6 months for each axle group being measured.

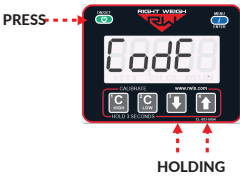
SECURITY PIN CODE (OPTIONAL)



It is optional to set a security PIN code on the scale. Once a PIN code is set, the feature is enabled and the 5 digit number will be required to gain access to the calibration and operating mode settings.

Once the PIN code feature is enabled, it can be changed but the feature cannot be disabled without resetting the calibration values. If you would like to disable the PIN code feature, please call Right Weigh Technical Support listed on page 2.

SET PIN CODE



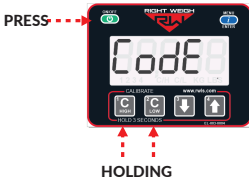
With the gauge off, press and hold both the C LOW and C HIGH buttons, then press the ON/OFF button. Release all three buttons. The gauge will display "Code".



Press the MENU button and "00000" will display on the screen. Enter a 5 digit PIN code using the 1, 2, 3, and 4 buttons. Press the MENU button again to save the code.

**If the display shows "----", then there is already a code set.

CHANGE PIN CODE



With the gauge off, press and hold both the C LOW and C HIGH buttons, then press the ON/OFF button. Release all three buttons. The gauge will display "Code".



Press the MENU button and "----" will display on the screen. Enter the previous PIN code. If the code entered is correct, the display will show "Good".



Press the MENU button and enter the new 5-digit PIN code using the 1, 2, 3, and 4 buttons. Press the MENU button again to save the code.

Follow these steps while weighing your vehicle:

1: Park on a level surface. Shift the transmission to neutral and set the parking brakes.

2: Chock the wheels to prevent unexpected vehicle movement, then release the parking and service brakes.

3: Make sure the Height Control Valve (HCV) has fully inflated the air bags. If needed, briefly dump the air from the suspension and allow the HCV to refill the system. (This may take several minutes depending on the type of HCV.)



4: Press the ON/OFF button to turn on the Right Weigh load scale.

5: Adjust the suspension or the load itself until the Right Weigh load scale displays a weight value below your legal limit.



6: Press the blue MENU button to display other axle groups or calibration sets.



7: Press the ON/OFF button to turn off the Right Weigh load scale.

KEYPAD FUNCTION GLOSSARY



FUNCTION	DESCRIPTION	BUTTON SEQUENCE	
		HOLD	PRESS
Power On / Off	Power the display on or off. Note: Pressing the ON/OFF button while in a configuration menu saves the selection and powers off the display.		
Next Axle Group / Next Screen	Cycles to the next axle group or menu screen.		
Change Units	Press while weight is displayed to change the units from pounds (lb) to kilograms (kg).		
Set Operating Mode	With the display off, use this key sequence to enter the operating mode selection menu. While in this menu, use the UP arrow button to cycle through the available options. See Operating Modes section.		
Set Number of Bar Sensors	With the display off, use this key sequence to enter the menu to set the number of bar sensors connected to the gauge. While in this menu, use the UP arrow button to cycle through the available options.		
PIN Code	With the gauge off, use this key sequence to create or change an existing PIN code. See Security PIN Code section.		
Diagnostics Menu	With the display off, use this key sequence to enter the diagnostics menu and view diagnostic data for the gauge. See Diagnostics Menu section.		
Set Empty Calibration	While the desired axle group is shown, press and hold the C LOW button until the C/L indicator appears. Use the arrow buttons to adjust the displayed weight to match the actual axle group weight. Press and hold the C LOW button until the C/L indicator disappears to save.		
Set Loaded Calibration	While the desired axle group is shown, press and hold the C HIGH button until the C/H indicator appears. Use the arrow buttons to adjust the displayed weight to match your actual axle group weight. Press and hold the C HIGH button until the C/H indicator disappears to save.		
Adjust Weight Value	While calibration is enabled, adjust the weight value using the UP and DOWN arrows		OR
Next Selection	The UP arrow is used to change selections in the menu screens.		
Set Measurement Mode	With the display off, use this sequence to change the measurement mode. DEF (Default) - absolute weight (LBS or KG) PC (Percent) - percent of load (0-100%).		
RS232 Configuration Menu	With the display off, use this key sequence to enter the RS232 configuration menu. See RS232 Configuration section.		



KEYPAD TEST (screen #8)

This screen will show "PAD 0" and pressing each of the buttons should show a separate number listed below:

- | | | |
|---------|---------|---------|
| = PAD 1 | = PAD 3 | = PAD 5 |
| = PAD 2 | = PAD 4 | |



RS232 CONNECTION - if applicable (screen #9)

This screen displays the RS232 connection status:

ALonE - not connected to another Right Weigh gauge

Front - connected to another Right Weigh gauge, front of the chain

CEnt - connected in between two other Right Weigh gauges

End - connected to another Right Weigh gauge, end [back] of the chain

Press the MENU button to go back to screen #1 and then press the ON/OFF button to power off the gauge and exit the Diagnostics Menu.

This scale can transmit weight data over RS232. Use the RS232 configuration menu to adjust the communication protocol, averaging time, and message period.



To enter the RS232 Configuration Menu: With the display off, press and hold the C LOW and DOWN arrow button and press ON/OFF. Release all buttons once the display illuminates.



MESSAGING PROTOCOL (screen #1)

When the display turns on the first screen will contain the messaging protocol setting. Press the UP arrow button to cycle through the available options.

232-1 - default messaging protocol

For details on Right Weigh RS232 messaging protocol visit: <https://rwls.com/wp-content/uploads/2022/07/rwlsnmeaserialdatainterface-spec-v4.1.pdf>

232-2 - GeoTab messaging protocol

Press the MENU button to cycle through the following screens.



AVERAGING TIME (screen #2)

This screen contains the averaging time setting. Each weight value output over RS232 is generated by taking a rolling average of some duration of weight samples. Averaging time is this duration of time (in seconds) in which weight samples are taken to create the rolling average. 60 seconds ("A 60") is the default setting.



MESSAGE PERIOD (Output Frequency - screen #3)

This screen contains the message period (output frequency) setting. The message period setting is the duration of time (in seconds) between messages. 15 seconds ("P15") is the default setting.

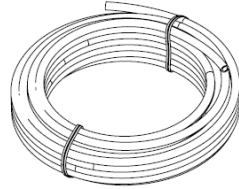
PROBLEM	CAUSE	SOLUTION
Erratic / Inaccurate Weight Readings	The vehicle is not parked on a level surface	Park on level concrete ground. Parking on sloped or banked surfaces will cause the vehicle weight distribution to shift between the axle groups. Additionally, if one or more of the vehicle's wheels are in a pothole, that could result in additional pressure or torque on the suspension air bags. This will cause the suspension to have a different air pressure than what is normally needed to hold up the given weight.
	The vehicle's brakes are on	Release the parking brakes when weighing and/or calibrating. When the vehicle brakes are set, they could apply additional pressure or torque on the suspension air bags. This will cause the suspension to have a different air pressure than what is normally needed to hold up the given weight.
	There is a significant air leak in the suspension system	Check air lines for leaks. Having a leak could cause the HCV to refill the suspension at regular intervals to maintain the vehicle's ride height. If there is a significant leak, the gauge display will slowly decrease in value and then quickly increase in value when the HCV refills the suspension system.
	The Height Control Valve (HCV) is malfunctioning or broken	If the HCV is not functioning correctly, the air pressure applied to the suspension system could be inconsistent and/or erratic. To test for an HCV problem, acquire a weight reading from the Right Weigh gauge and write it down (refer to gauge operating instructions for proper procedure). Drive the vehicle around the block and return to the same location. Acquire a second reading from the Right Weigh gauge. If the two readings are significantly different, then the HCV might be malfunctioning.
Gauge reading "noAir"	One or more air inputs are not receiving air (If 2 air sensors are set to Average mode and one isn't receiving air, gauge will read noAir message)	Check that all air inputs are receiving air. Pull airline out of air fitting(s) on the back of the gauge. Follow the airline along the vehicle to the airbags to check that it hasn't been pinched or damaged. Dump suspension and refill to ensure air bags are full.
	Lift Axle being measured is in the up position	If an air input is measuring a lift axle on the vehicle and the lift axle is in the up position, the air bags will be deflated of air and the gauge will read the noAir message.
App Won't Connect to the Gauge	Scale is connected to a constant power source	Connect the scale to a switched power source between 9 and 32 VDC (typically either the vehicle marker lights or the AUX/ABS wire). If the gauge is powered too long it can stop transmitting a Bluetooth signal and may need to be disconnected and reconnected to work again.
	Scale is connected to another device	Disconnect the scale from the other device before connecting through your device.
	Phone requires re-set	To reset your phone - close the app, turn off Bluetooth, and wait 10 seconds. Then open the app and turn the Bluetooth back on. Try rescanning for the scale. If this still doesn't work, in some cases it is necessary to restart the phone completely.
Gauge Will Not Calibrate Low/High	Air pressure in the system is not changing	To enter low or high cal mode, the gauge must see a measurable change in air pressure. Make sure you calibrate high when the vehicle is near the legal limit and calibrate low when the truck is empty. Also, be sure the air line is connected directly to an air bag - NOT the main air supply or brake system.

PROBLEM	CAUSE	SOLUTION
Scale Does Not Power On	Scale is not connected to a switched power source of between 9 and 32 VDC	Connect the scale to a switched power source between 9 and 32 VDC (typically either the vehicle marker lights or the AUX/ABS wire). If there is a bad connection in the circuit which causes voltage to drop below 9 volts, the scale will not power on. Test the power source with a voltmeter.
	Scale is connected directly to the battery	Connect the scale to a switched power source between 9 and 32 VDC (typically either the vehicle marker lights or the AUX/ABS wire). The scale is active anytime it is connected to power, even if the display is off. To reset it, disconnect and reconnect to the power source, wait 10 seconds, then try again to turn the display on.
	Polarity is incorrect	Correct the polarity. The red wire must be connected to positive and the black to negative.
Cannot Change Calibration Data	The scale has an active user-defined security PIN code	If the scale is protected with a PIN code, the PIN must be entered before calibration data can be changed. To understand how to reset the PIN code, see page 16. If the PIN code has been forgotten, please call Right Weigh technical support listed on page 2 for further assistance.

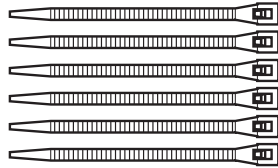
The following is a list of additional parts needed for air line installation. This list is just a suggestion and may not be all of the parts needed for your specific vehicle. Check with your Right Weigh dealer for optional installation kits.

1/4 Inch Air Line

Approximately 20 to 30 feet (6 to 9 meters)

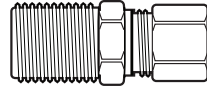


20 or more Zip Ties



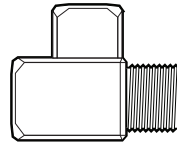
Male Straight Fitting

Air line fitting for 1/4" air line, with a thread size to match the street tee fitting.



Street Tee Fitting

The thread size should match the air bag fitting.
(1/4" NPT or 3/8" NPT)



It is very important that all wiring connections be made watertight.

Connections which are not watertight can allow moisture to travel through the individual strands of the wires and make it's way into the scale, causing permanent damage to the electronics.

Heat shrinkable splices are included in the 201-SK Installation Kit.



Crimp each end of the wire into the connector with a wire crimp tool (tool not provided).

After crimping and heat shrinking



With a heat gun or heat torch, heat the connector until it shrinks completely around each wire end. Make sure you do not burn the wire jacket.

Add heat shrink



After all connections have been made, heat shrink the entire group of splices so that it seals on the outer jacket of both cables.

After heat shrinking





At Right Weigh, we are committed to delivering top-notch products that perform as intended. We stand behind our commitment with confidence. Every new product manufactured or sold by Right Weigh, Inc. is backed by a 3-year warranty from the date of purchase, ensuring freedom from material or manufacturing defects. Within the initial three years of purchase, Right Weigh Inc. will, at its discretion, address product issues by correcting, replacing, or refunding the affected item in accordance with the guidelines outlined in this statement.

Please note that this warranty does not cover product problems resulting from:

1. Improper application, incorrect installation, or operation outside the approved specifications as stated in the product instruction manual.
2. Accidents, faulty suspension parts, or power surges.
3. Inadequate maintenance or repairs.
4. Abuse, misuse, or unauthorized modification.
5. Natural disasters, including but not limited to lightning strikes, floods, fires, earthquakes, etc.

Under this warranty, Right Weigh, Inc.'s liability is limited to the original cost of the product in question and does not extend to labor costs or other expenses related to installation, removal, or replacement of a Right Weigh, Inc. product. Right Weigh, Inc. does not assume responsibility or liability for any loss or damage resulting from the use of our products. Right Weigh, Inc. shall not be liable for direct, indirect, special, incidental, or consequential damages, including loss of profits or loss of time, arising from the performance of a Right Weigh, Inc. product.

We reserve the right to make improvements to product designs, construction, and appearance without prior notice. Additionally, we may discontinue support, warranty, or repair for products that we deem obsolete or for which repair parts are no longer available. No employee or agent of Right Weigh, Inc. has the authority to modify the terms of this warranty without the express written permission of Right Weigh, Inc.

Please contact Right Weigh, Inc. before uninstalling any product suspected of failure. Our support team may engage in troubleshooting efforts to determine if the product is eligible for coverage under this warranty policy. If the product has been uninstalled and troubleshooting cannot be performed, the product in question must be returned to Right Weigh, Inc. for inspection before warranty eligibility can be determined.

To initiate a return, repair, or replacement of a product, you must obtain a Return Merchandise Authorization (RMA) number. This number is required before any product can be returned. Please contact our Customer Service at 503-628-0838 to obtain an RMA number or send an email to rwls@rwls.com.

Third Party extended warranties are not recognized or accepted as valid forms of coverage by Right Weigh, Inc. If you have purchased or obtained an extended warranty from a third-party provider, you must contact the provider for any claims outside of the standard 3-year warranty offered by Right Weigh, Inc. We encourage you to review the terms and conditions of your extended warranty to fully understand its limitations and scope. Right Weigh, Inc. does not extend warranty coverage to any product refurbished by a third-party reseller.

Before returning any product, please obtain a Return Merchandise Authorization (RMA) number by calling customer service at 503-628-0838 or emailing rwls@rwls.com.

Include the RMA number or a printed copy of the RMA with the returned product. Shipping costs for returns must be prepaid by the customer unless otherwise specified by Right Weigh, Inc. Ensure the items are securely packed to prevent damage during shipping and consider insuring against possible damage or loss. Right Weigh, Inc. will not be liable for damages resulting from inadequate or careless packing or loss during transit.

Credit/Refund:

- a. Only applies to new, unused products in their original packaging.
- b. Must be returned within 60 days of original purchase to receive full credit.
- c. New, unused products returned after 60 days from original purchase are subject to a 10% restocking fee.
- d. Returns are not accepted beyond 180 days from original purchase date.

Right Weigh Inc. will issue credit or a refund after evaluating the returned product. Whether the original purchaser receives a credit or refund is at Right Weigh Inc.'s discretion.

Warranty Repair or Replacement

- a. Applies to products with material or manufacturing defect within the period defined by the warranty policy.
- b. Must be able to provide proof of purchase date.
- c. Before uninstalling the product, contact customer service at 503-628-0838 or email rwls@rwls.com for required troubleshooting.

Right Weigh, Inc. will evaluate the returned product(s) at no charge. If the product is determined to be under warranty, it will be repaired or replaced with equivalent product(s). Right Weigh, Inc. will cover the cost of shipping the warranted product back to the customer using a shipping method of our choosing, equal to or faster than the method used by the customer. For products or parts not covered by warranty, repair or replacement will be done at the customer's expense upon authorization.

We appreciate your understanding and cooperation in adhering to our warranty and return policy. If you have any further questions or require assistance, please don't hesitate to contact our Customer Service at 503-628-0838 or rwls@rwls.com.

THANK YOU FOR YOUR BUSINESS

Thank you for choosing to drive more and scale less! Here at Right Weigh, we are committed to making our products simple to install and easy to use. We understand that installation can vary between vehicles and yours may not be described in this manual. In any event, our technical support team is ready to answer your questions!

SCAN FOR ADDITIONAL RESOURCES



**CONTACT US FOR
ADDITIONAL SUPPORT**

FOLLOW US!



(503) 628-0838
(888) 818-2058 - Toll Free (USA ONLY)



support@rws.com



www.rwls.com/how-to-calibrate-install/



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