Cardinal®

TRUCK SCALE JUNCTION BOXES

USED ON ALL STANDARD ANALOG MULTI-CELL APPLICATIONS

Provides excellent surge protection to guard against lightning strikes and voltage spikes.

Cardinal's junction box offers a full array of transient protection circuitry designed to eliminate or reduce the effects of damaging voltage surges - no need to buy additional surge suppression devices.

This junction box has been designed with the scale technician in mind. The adjustments have been designed to provide a new level of sensitivity changing only approximately two divisions per turn of the potentiometer (actual change is dependent upon other factors including division value and load cell characteristics). This eliminates the frustrating experience of having the weight display jump multiple divisions after barely moving the potentiometer - now a thing of the past.

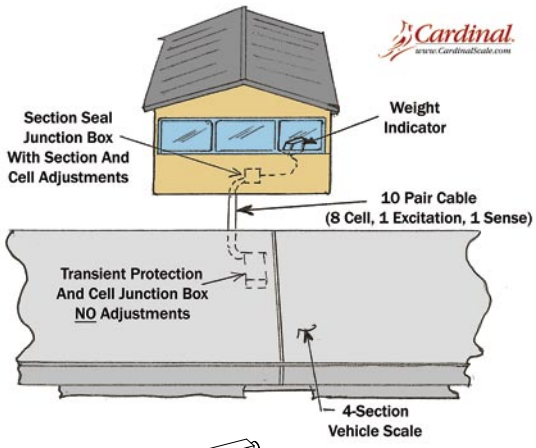
CARDINAL TRUCK SCALE JUNCTION BOXES

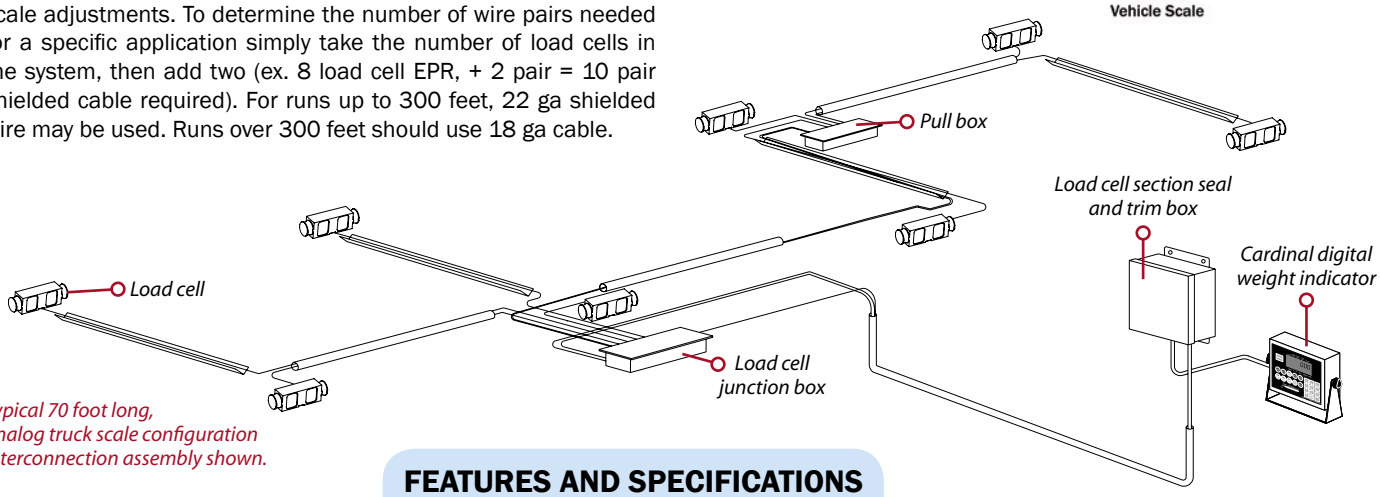
The Cardinal system consists of two junction boxes. The junction box located in the scale is used for load cell termination as well as surge protection. The circuitry provides a two-stage, 15kA, 1ps, gas discharge arrestor/ TVS diodes. Transient protection is provided on all terminals on the surge protection board. This board MUST be grounded back to the AC power ground for system protection to work. No scale adjustments are made on this board.

The second junction box, which is normally located in the scale house at the digital indicator, provides side to side balance adjustment as well as section adjustment. This board in its standard configuration can accommodate 12 load cells, but is also available in 24 load cell versions to make wiring and calibrating large scales much easier. This board also has gas discharge tubes for transient protection and must also be grounded to the AC power ground.

Since all adjustments are made at the section seal board, a scale technician no longer has to unbolt access plates to make simple scale adjustments. To determine the number of wire pairs needed for a specific application simply take the number of load cells in the system, then add two (ex. 8 load cell EPR, + 2 pair = 10 pair shielded cable required). For runs up to 300 feet, 22 ga shielded wire may be used. Runs over 300 feet should use 18 ga cable.

Any sections that are not used in a specific application should be disabled. This is easily accomplished by clipping a simple wire loop just above the section trim potentiometer.





Typical 70 foot long, analog truck scale configuration interconnection assembly shown.

FEATURES AND SPECIFICATIONS

LOAD CELL JUNCTION BOX

- Part No. 3502-D484-0A
- Stainless steel, NEMA 4X enclosure
- Dimensions: 7.6" W x 15.5" L x 3.3125" H
- No trim pots
- Spring cage clamp wire terminals for easy wiring
- 12 load cell capacity
- Two-stage (15kA, -ps gas discharge arrestor/TVS diode) transient protection on all circuits
- Cable fittings (load cell junction box to trim box)
  - Accepts 0.5" – 0.63" diameter cable
- Cable fitting (load cells)
  - 12ea: Accepts 0.19" – 0.31" diameter cable

LOAD CELL SECTION SEAL & TRIM BOX

- Part No. 3502-D503-0A
- Stainless steel, NEMA 4X enclosure
- Dimensions: 6" W x 10.75" L x 4.13" H
- 25-turn trim pots for load cell trim and section trim
- Spring cage clamp wire terminals for easy wiring
- 12 or 24 load cell versions
- Two-stage (15kA, -ps gas discharge arrestor/TVS diode) transient protection
- Cable fittings (load cell junction box to trim box)
  - Accepts 0.5" – 0.63" diameter cable
- Cable fitting (trim box to digital weight indicator)
  - Accepts 0.19" – 0.31" diameter cable

Cardinal Scale reserves the right to improve, enhance, or modify features and specifications without prior notice.

MADE IN USA

ISO 9001:2000

Sold By:

Cardinal®
Cardinal Scale Manufacturing Co.
203 E. Daugherty, Webb City, MO 64870 USA
Ph: 417-673-4631 or 800-441-4237 • Fax: 417-673-5001
www.CardinalScale.com