



B-TEK Surge Spanker 2 Analog and Digital Scale Surge Suppressor Owner's Manual

[Home](#) » [B-TEK](#) » B-TEK Surge Spanker 2 Analog and Digital Scale Surge Suppressor Owner's Manual 

Contents

- [1 B-TEK Surge Spanker 2 Analog and Digital Scale Surge Suppressor Owner's](#)
- [2 Product Information](#)
- [3 Product Usage Instructions](#)
- [4 SPECIFACATIONS](#)
- [5 INSTALLATION](#)
- [6 Board Layout](#)
- [7 Documents / Resources](#)
 - [7.1 References](#)
- [8 Related Posts](#)



B-TEK Surge Spanker 2 Analog and Digital Scale Surge Suppressor Owner's



Product Information

- **Product Name:** Surge Spanker 2
- **Model Number:** 877-100000
- **Ingress Rating:** IP68
- **Latch Type:** Integrated locking Latch with Security Seal
- **Cable Grips:** 2
- **Cable Diameter Grommet Range:** (2) .20 – .35
- **Weight:** 1.5 lb
- **Enclosure Material:** UV Resistant Polycarbonate
- **Dimensions:** 6 x 6 x 3
- **Mounting Holes:** Yes
- **Terminals:** Spring Loaded Removable Terminals
- **Scale Type:** Analog or Digital Compatible
- **Operating Temperature:** Not specifies
- **Surge Protection:** 13 Gas Discharge Tubes, and 6 Ferrite Core Inductors
- **Approvals:** UL-50/c-UL (E207562)

Product Usage Instructions

1. Inspect the Surge Spanker upon receipt to ensure it is undamaged and all parts are included.

Installation:

- **For analog scales, connect the terminals as follows:**
 1. +SIG / RS485
 2. -SIG / RS485+
 3. -ESC / GND
 4. -SEN / VDC+
 5. +ESC / VDC+

1. +SEN / GND

2. SHIELD

6. For digital scales, move the jumpers to the right (485) to avoid interference with the RS485 signal.

7. For analog scales, move the jumpers to the left (AN) for additional protection from the ferrite core inductors.

• **Configure Boards:**

Digital scales require moving the jumpers to the right (485) to prevent interference with the RS485 signal.

Analog scales require moving the jumpers to the left (AN) for additional protection from the ferrite core inductors. Enclosure Sealing Practices: No information provided in the user manual.

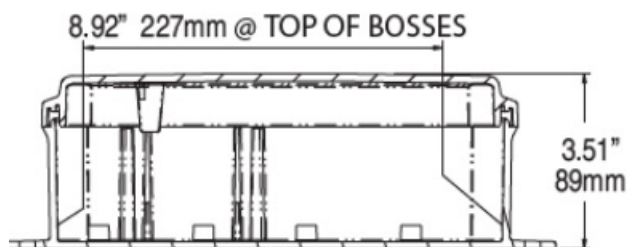
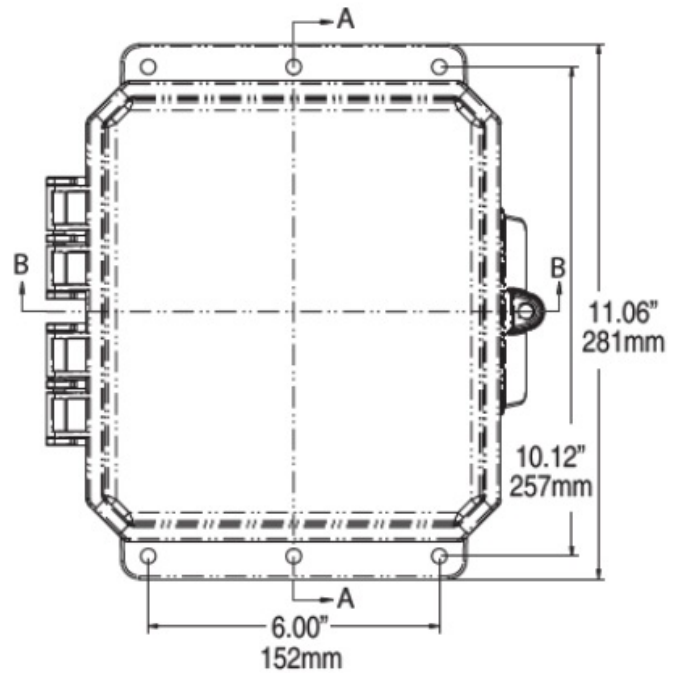
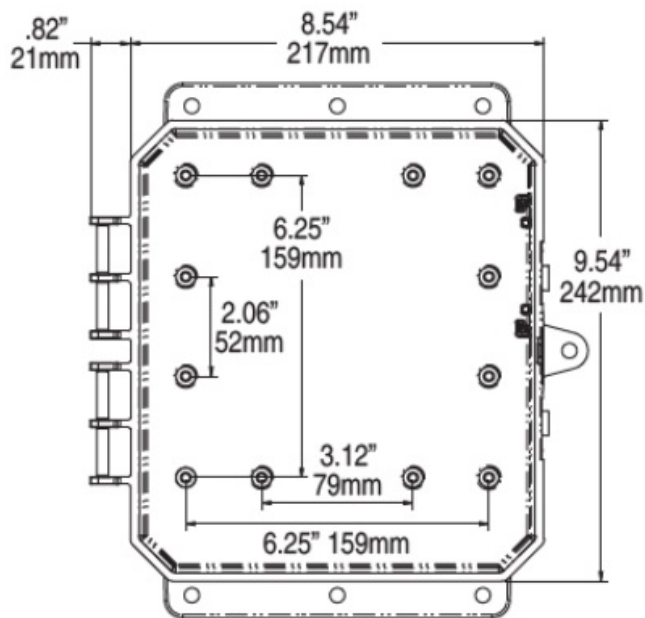
For more information or customer support, please contact B-TEK Scales, LLC at:

- **Address:** 1510 Metric Ave. S.W., Canton, OH 44706
- **Tel:** 330.471.8900
- **Fax:** 330.471.8909
- **Website:** www.B-TEK.com

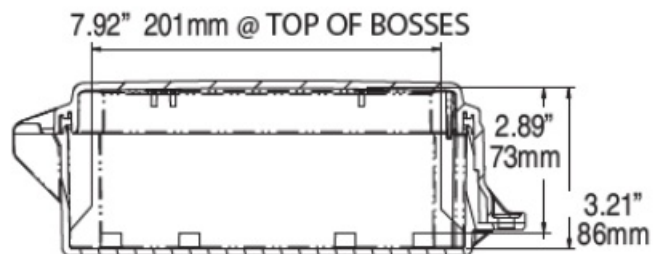
SPECIFICATIONS

Model	Surge Spanker 2
Model Number	877-100000
Ingress Rating	IP68
Latch Type	Integrated locking Latch with Security Seal
Cable Grips	2
Cable Diameter Grommet Range	(2) .20" – .35"
Weight	1.5 lb
Enclosure Material	UV Resistant Polycarbonate
Dimensions	6" x 6" x 3"
Mounting Holes	
Terminals	Spring Loaded Removable Terminals
Scale Type	Analog or Digital Compatible
Operating Temperature	0°C ~ +40°C / 32°F – 104°F
Surge Protection	13 Gas Discharge Tubes, and 6 Ferrite Core Inductors
Approvals	UL-50/c-UL (E207562)

DIMENSIONS



SECTION A-A



SECTION B-B

INTRODUCTION

- The BTEK Surge Spanker 2 has been designed to protect sensitive electronics from transient surges, be easy to service, and install.
- Integrated snap latch ensures a good seal every time without using tools.
- Summing board uses removable expansion ports to simplify wiring.
- Two jumpers are available on the signal lines to convert between analog load cells and digital RS485 signals.
- Compatible with all scale models and indicators



INSTALLATION

- When you receive the Surge Spanker, inspect it to make sure that it is not damaged and that all are parts are included:
- Remove the enclosure from the carton.
- Inspect the enclosure and board for damage

Make sure all parts bag components are included.

1. (2) Jumpers
2. (2) Wage Terminal Strip Connectors

Installation

- Orient the latch towards the top, hinge on the bottom
- It is recommended to install the box within 5 feet of the digital weight indicator.
- Connect the ground wire to the indicators case ground.
- Important! Make sure a #6 ground wire has been installed bonding the indicator's case to the weighbridge's ground. Failure to install this wire will cause load cell damage during a surge event.
- Turn off indicator, then cut the home run cable to the appropriate length to reach the Surge Spanker 2.
- Strip back 3" off the outer jacket, then strip 3/8" jacket on each individual wire.
- Install wires in the following order using the insertion tool or flat head screwdriver to open terminals:

ANALOG / DIGITAL

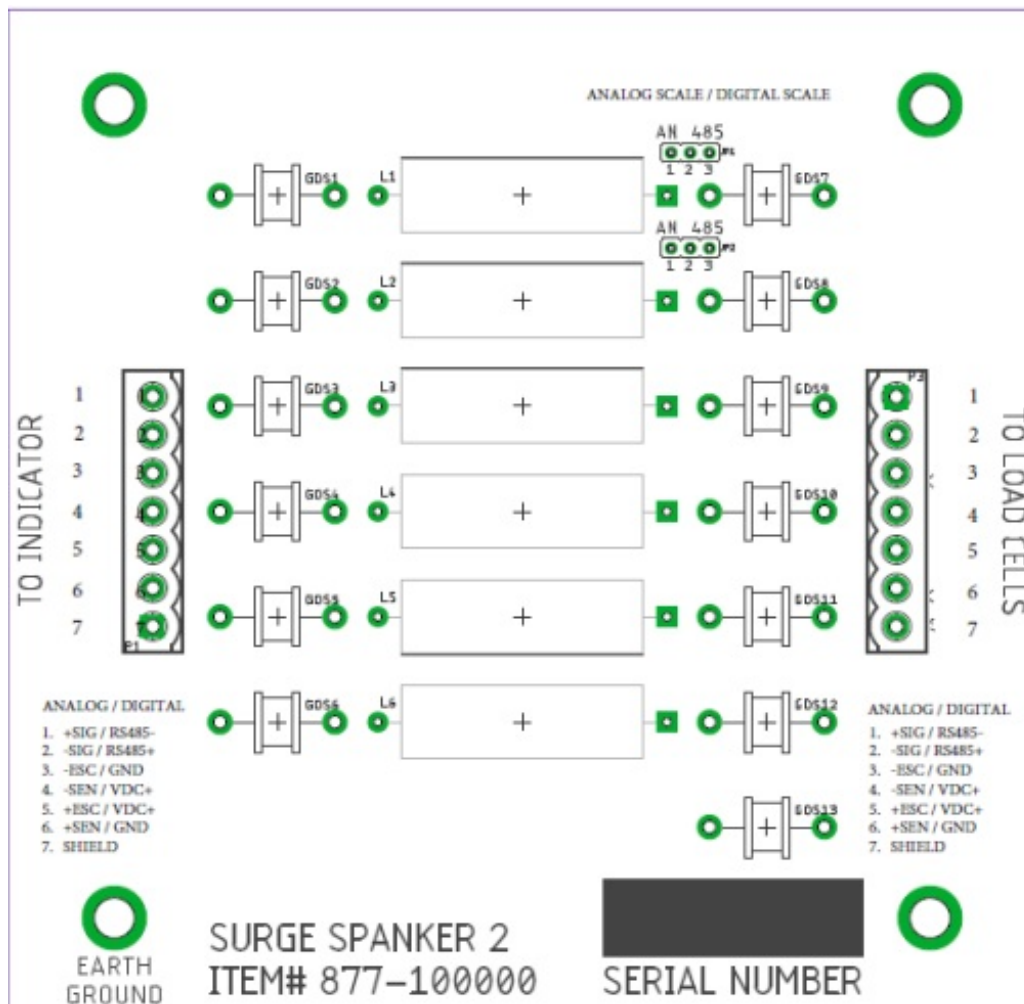
1. +SIG / RS485-
2. -SIG / RS485+
3. -ESC / GND
4. -SEN / VDC+
5. +ESC / VDC+
6. +SEN / GND
7. SHIELD

Position analog / digital jumpers on the board depending on system type. More details are shown on the next page.

Configure Boards

Digital Scales will require jumpers to be moved to the right (485) to not interfere with the RS485 signal. Move jumpers to the left (AN) for analog scales for additional protection from the ferrite core inductors.

Board Layout



Enclosure Sealing Practices

- Cord grips should be tight enough to not allow cables to slip
- Keep load cell pig tail wires away from enclosure seal
- Wipe enclosure seal and enclosure sealing surface before closing
- Cord grip seal should secure to cables outer jacket and not show wrinkles on the grommet
- Do not seal cord grip on shrink wrap to stainless Braided surface, remove or strip back to clean PVC / Polyethylene cable
- Use hair dryer / cool heat gun to remove any moisture from enclosure and always install new desiccant pack as they become saturated over time.
- Do not allow the enclosure to twist while mounting. Shim corners if this happens as it can cause a bad seal
- Seal / replace damaged / cut cables, water can wick into the box.

Documents / Resources

  Surge Spanker 2	B-TEK Surge Spanker 2 Analog and Digital Scale Surge Suppressor [pdf] Owner's Manual Surge Spanker 2 Analog and Digital Scale Surge Suppressor, Surge Spanker 2, Analog and Digital Scale Surge Suppressor, Scale Surge Suppressor, Surge Suppressor
---	---

References

- [B-TEK Truck Scales and Industrial Weighing Solutions](#)
- [User Manual](#)