

1280 Enterprise™ Series

ESD Grounding Update for Touch Only Models

Product: 1280 Panel Mount Touch Only Models

Issue: Touchscreen is unresponsive when touched and requires a power cycle to restore operation

Cause: Not adequately grounded between panel mount bracket/display and the enclosure

Solution: Installation of a ground strap, additional ground clips and star washers

The safety ground on the 1280 panel mounts does not adequately shunt high frequency electrostatic discharge (ESD) which can cause the I2C Bus on the touchscreen to lock up.



Manuals can be viewed or downloaded from the Rice Lake Weighing Systems website at www.ricelake.com/manuals



Electrostatic sensitive device, observe handling precautions to prevent shock or damage caused from ESD.

The 1280 ESD Grounding Kit (PN 194056) contains the necessary parts to resolve the shield grounding issue described above. Follow the grounding procedure included in this document to properly install the grounding kit parts to prevent this issue.

PN 194056 Grounding Kit Contents

Part No.	Description	Qty
17780	Ground Strap, 16" Tinned Copper Braid	1
53075	Clamp, Ground Cable Shield	1
193810	Clamp, Ground Cable Shield Small	2
15139	Washer, Star Lock NO 10 Type A	7
14621	Nut, Keps 6-32NC Hex	1

Table 1-1. 1280 Grounding Kit Parts List

Grounding Procedure

1. Power down 1280 and disconnect from power source.
2. Attach ground strap to the backplate of the panel mount using one of the studs and nuts that hold the backplate in place. Order of reassembly must be star washer, ground strap, star washer and lastly the original nut.



Torque the nuts that secure the backplate to 15 in-lb (1.7 N-m).

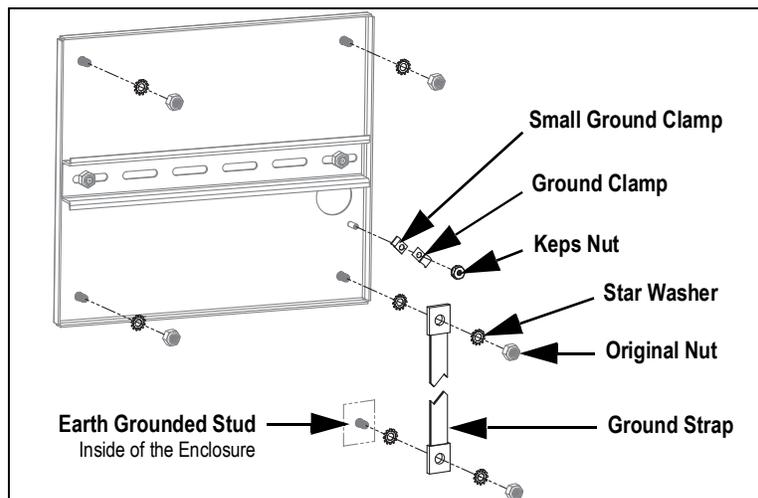


Figure 1. Backplate Shield Grounding

3. Secure the other end of the ground strap to an earth grounded stud inside of the enclosure with star washers on either side of the ground strap (Figure 1). Make sure there is an appropriate amount of slack in the grounding strap for opening and closing the enclosure door.
4. Replace the existing washers with star washers for the remaining three studs and nuts that hold the backplate in place.



Note *Torque the nuts that secure the backplate to 15 in-lb (1.7 N-m).*

5. Strip back the shielding of the display cable 1-2 inches, so the exposed wire makes contact with the ground clamp in the following step (Figure 2).
6. Ground the display cable and the touchscreen cable to the backplate grounding stud using two ground clamps and the Keps nut. PN 193810 ground clamp has a smaller radius and must be used with the touchscreen cable.



Note *The photo in Figure 2 is for illustration only and may not represent all panel mount applications. Grounding location and exact stud placement may vary.*

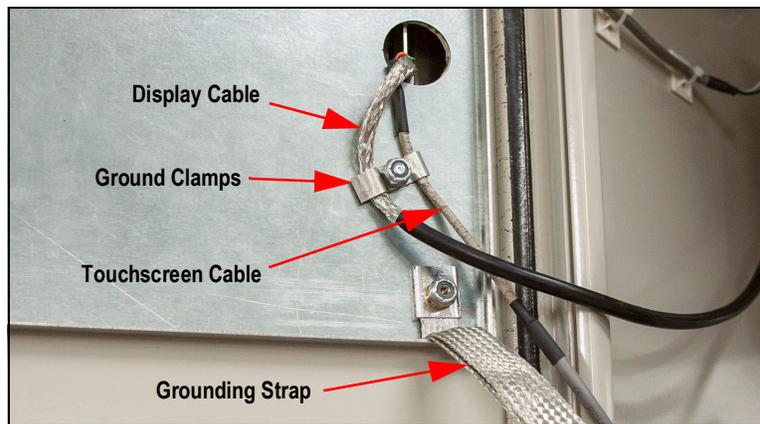


Figure 2. Panel Mount Shield Grounding

7. Remove the 1280 controller box from the enclosure.
8. Remove the original ground clamp used on both the display and touchscreen cables (Figure 3).
9. Ground the display cable and the touchscreen cable to the controller box using two ground clamps. PN 193810 ground clamp has a smaller radius and must be used with the touchscreen cable.

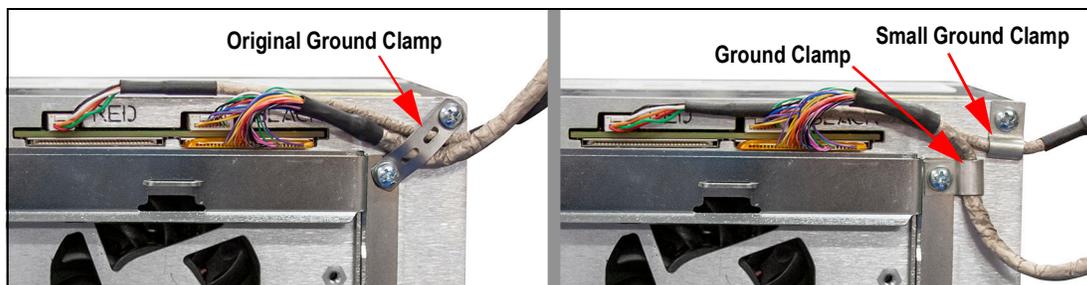


Figure 3. Controller Box Shield Grounding



Note *Reconnect any cables to the controller that were disconnect before reinstalling it back into the enclosure.*



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