

**Low
Impedance
Cable**

**#10 AWG
Low Impedance Cable**

Field
Installation,
Manual

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IMPORTANT!
STOP! AND READ THIS FIRST

Upon receiving the Low Impedance Cable, review the Field Termination Instructions to ensure proper field installation. Examine the contents of the Field Termination Kit to ensure that all parts have been received.

This Field Termination Kit Includes:



Ground Banding Split Ring —(PART A)

P/N 110-0021-001, Shell size 10 (.63" ID) Qty. 1



Neutral Banding Split Ring — (PART B)

P/N 110-0020-001, Shell size 8 (.5" ID) Qty. 1



Conductor Clamp — (PART C)

P/N 110-0042-002, Size 1/2" to 29/32" dia. Qty. 2



Shrink Tubing — (PART D & E)

P/N 128-0160-002, Size 1 1/2" dia. 2.5" length Qty. 1

P/N 128-0160-002, Size 1 1/2" dia. 6" length Qty. 1



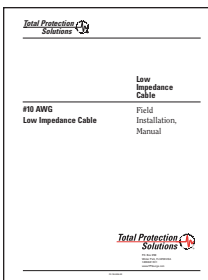
Ground Conductor (color green) — (PART F)

P/N 224-0016-060, 2.5ft. Qty. 1



Neutral Conductor (color white) — (PART G)

P/N 224-0016-063, 2.5ft. Qty. 1



Field Installation Instruction — (PART H)

P/N 750-0092-008 (This Document) Qty. 1

Cable Routing

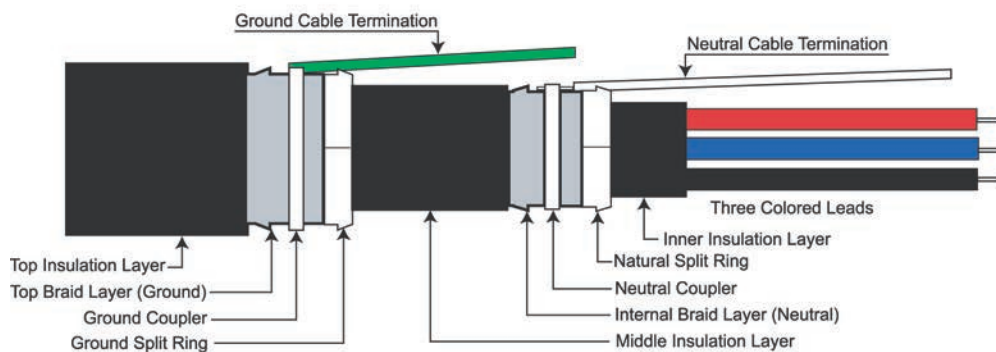


CAUTION: TVSS's performance will be reduced if the conductors are (a) too long, (b) have too many bends or (c) have sharp bends.

Total Protection Solutions recommends the cable to enter from upper left or right side of the enclosure. However, any safe entry locations meeting the requirements of the National Electric Codes are acceptable. The selected entry location should ensure short conductor runs providing a direct route with a minimum of bends. If bends are required they should be sweeping bends. Do not make sharp 90° bends for "aesthetic" purposes.

With its patent pending ground and neutral shield design, the Low Impedance Cable TVSS Connection System can be installed with or without the use of steel or PVC conduit.

Low Impedance Cable – TVSS Connection



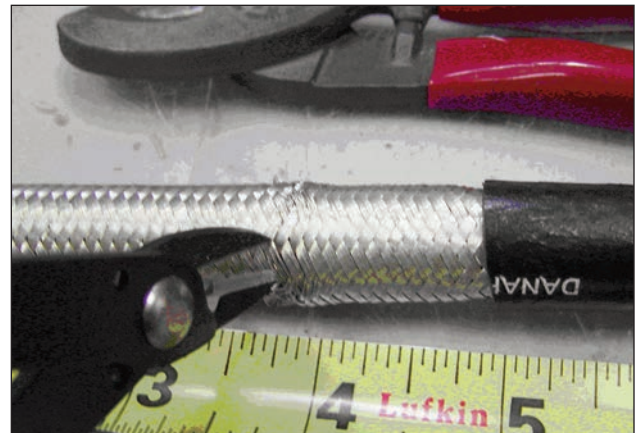
WARNING: HAZARDOUS VOLTAGES PRESENT Improper installation or misapplication may result in serious personnel injury and/or damage to electrical system. Read the complete installation instructions before proceeding with installation. Remove all power to the electrical panel before installing the Low Impedance Cable TVSS Connection System.



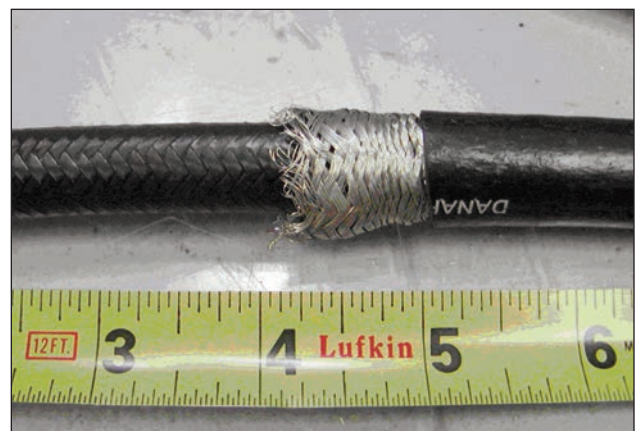
IMPORTANT SAFETY INSTRUCTIONS All work must be performed by licensed and qualified personnel. The electrical system must be properly grounded in accordance with the U.S. National Electrical Code, state and local codes or other applicable codes for the Low Impedance Cable TVSS Connection System to function properly. This device is suitable for installations rated at 600VAC or less.

WYE Configuration Termination instructions

1. Determine required length to make the connections inside the panel and add 5". Cut into the top insulation layer. Care should be taken not to damage the top braid layer. Cut around the outer layer and remove it from the end of the cable.

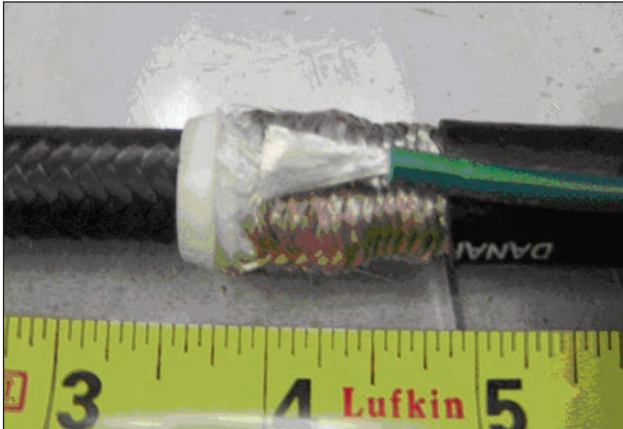


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2. Cut into the top braid layer approximately one inch and remove the excess top braid layer.





3. Take a ground banding split ring (PART A) and work it underneath the top braid layer. The braid layer should cover as much of the split ring as possible. It may be beneficial to use a tool as shown to open the braid layer making it easier to insert the split ring.

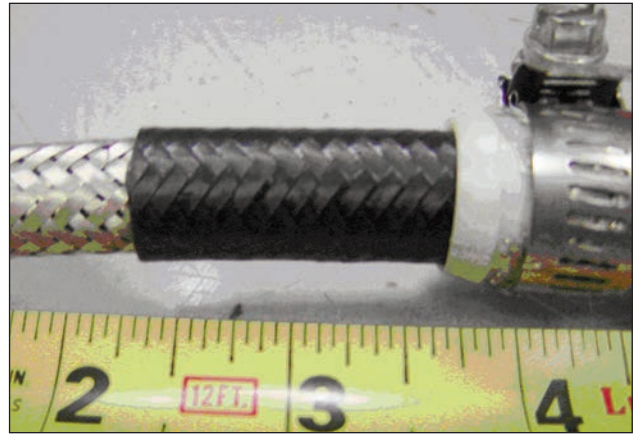


4. Strip the green ground conductor (PART F) approximately 1". Spread the leads out. Place it on the top braid layer as shown. Preform wire as shown.

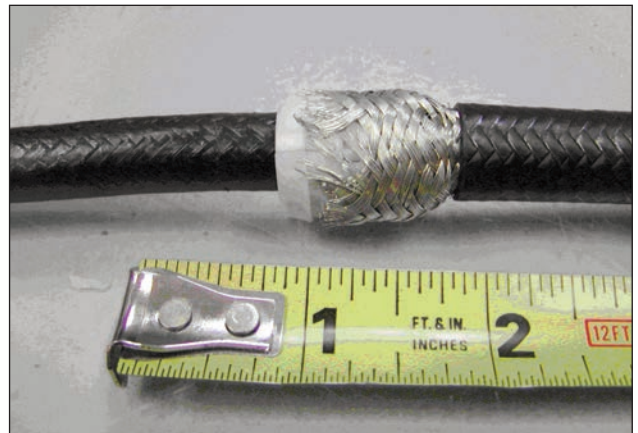


5. Using a conductor clamp (PART C) secure the green ground conductor to top braid layer. Make sure that the clamp is centered on the split ground banding ring, and tighten with a screwdriver.

- Moving down the cable a minimum of 1.5", cut and remove the next layer of insulation. Care should be taken not to damage the braiding underneath.
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- Leave approximately 1" of the internal layer of braid and remove the excess. Slide a neutral banding split ring (PART B) underneath the remaining braid layer.
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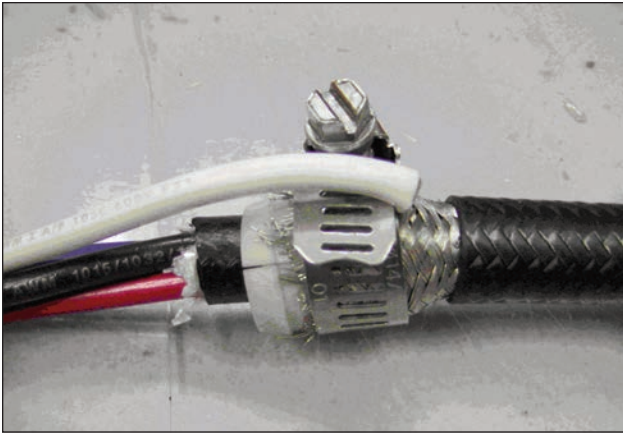


- Strip the white neutral conductor (PART G) approximately 1". Spread the leads out and place it on the internal braid layer as shown.
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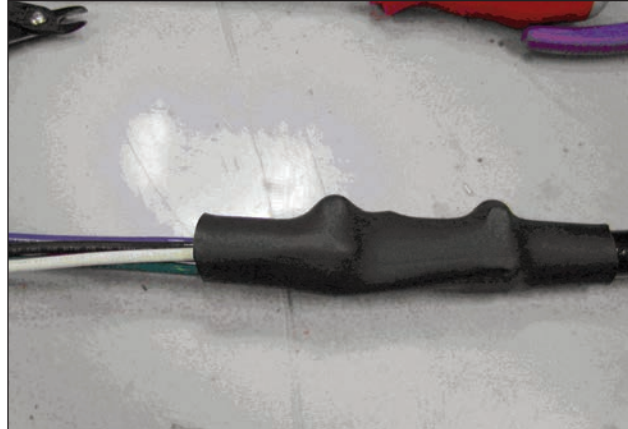


- Using a conductor clamp (PART C), secure the white neutral conductor to the internal braid layer. Make sure that the clamp is centered on the neutral banding split ring, and tighten with a screwdriver.





10. Fold the white neutral wire over the clamp and place a 2.5" heat shrink tubing (PART D) over the neutral termination. Heat the heat shrink over the neutral termination.



11. Fold the ground conductor back over the ground termination and cover both ground and neutral terminations with a 6" heat shrink (PART E). Heat the heat shrink.

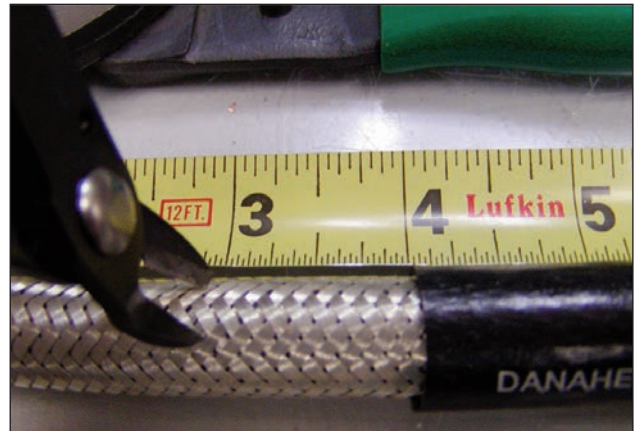
Delta Configuration Terminal Instructions

NOTE: 2.5" Shrink tubing (Part D) and white neutral conductor (Part G) are not required for Delta configuration.

1. Determine required length to make the connections inside the panel and add 4". Cut into the top insulation layer. Care should be taken not to damage the top braid layer. Cut around the outer layer and remove it from the end of the cable.



2. Cut into the top braid layer approximately one inch and remove the excess top braid layer.

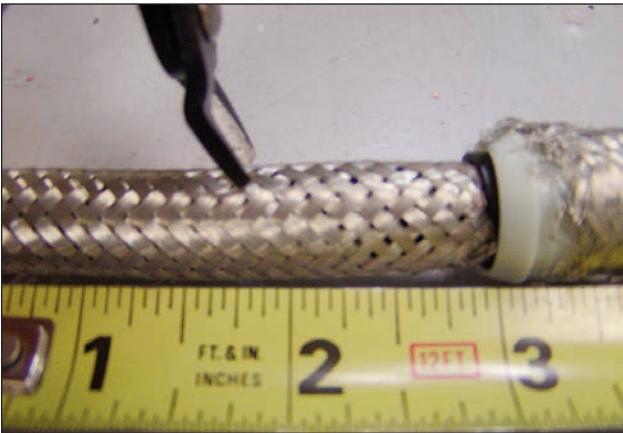


3. Take a ground banding split ring (PART A) and work it underneath the top braid layer. The braid layer should cover as much of the split ring as possible. It may be beneficial to use a tool as shown to open the braid layer making it easier to insert the split ring.



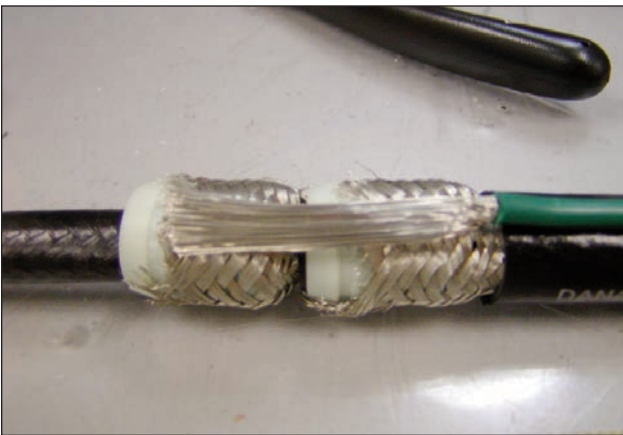


4. Cut back the second layer of insulation as close to the top insulator as possible. Move down one inch and cut around the internal braid layer. Remove the excess.





5. Slide a neutral bashing split ring (PART B) underneath the internal braid layer.



6. Strip a length of green ground conductor (PART F) sufficient to span the distance of both couplers (approximately 2 inches worth of stripped wire).

7. Using a conductor clamp (PART C) secure the green ground conductor to the top braid layer.



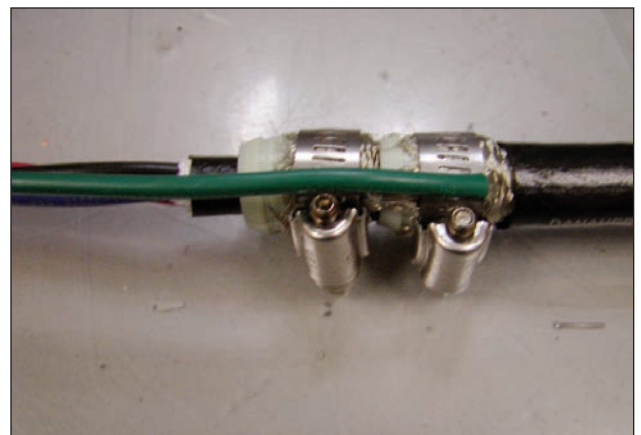
8. Using second conductor clamp (PART C) secure the other side of green ground conductor to the internal braid layer.



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9. With both couplers securely tightened, the cable should resemble the picture shown.



8. Bend the ground conductor back over both couplers and cover both couplers with a 6" heat shrink tubing (PART E). Heat the heat shrink tubing.





9. The finished product should resemble the picture shown.

NOTE: 2.5" Shrink tubing (Part D) and white neutral conductor (Part G) are not required for Delta configuration.

Total Protection
Solutions 

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