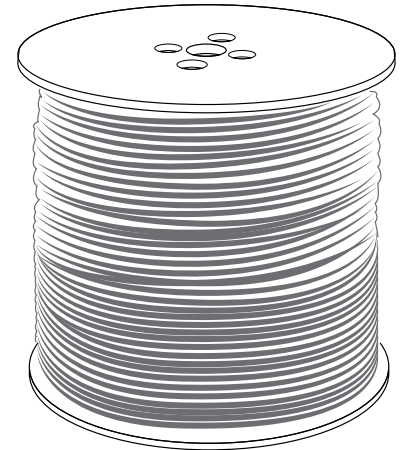


# Power Insert Cable Installation Guide

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## Product Description

The Power Insert cable is a 4 conductor 14 gauge cable that is run from the Control Panel to a predetermined point on the Trunk Line as designated by the Interconnect Drawings. The Power Insert Cable is used to provide additional power to the system.



## Tools and Materials required

1. 500 and 1000 foot spools of cabling
2. Cable connector ends
3. Cable connectors (Power insert WYE and/or Power insert TEE)
4. Wire Strippers
5. Flathead screw driver
6. Phillips head screw driver

## Ordering Information

P/N: 310-000061 FIELD WIREABLE, 4P-M

P/N: 310-000063 FIELD WIREABLE, 4P-F

P/N: 300-101032-01 500ft

P/N: 300-101032 1000ft

P/N: 370-000025 Power Insert TEE

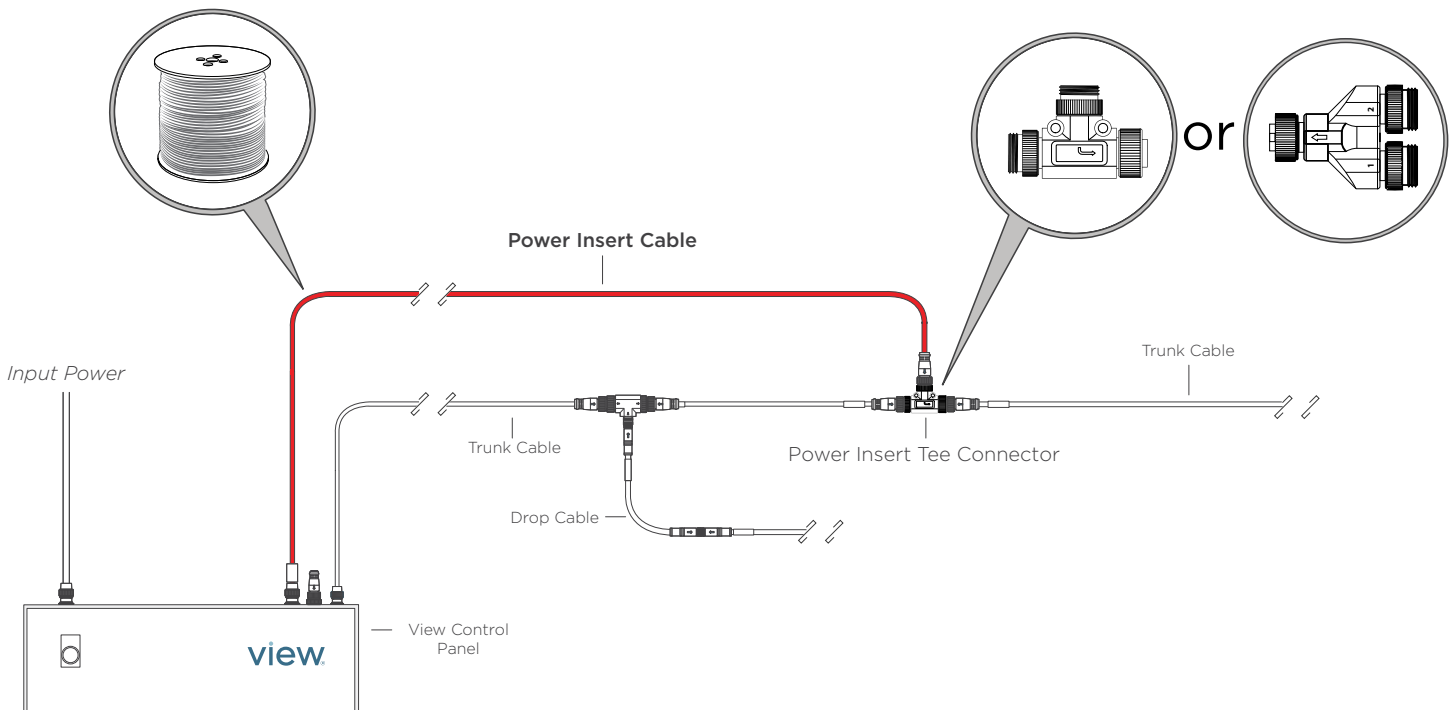
P/N: 370-000030 Power Insert WYE

## Installation Overview

The Power Insert Cable installation includes a spool of 4 conductor 14 gauge cable that will be field terminated, connected between the Control Panel and a predetermined location on the Trunk Cable.

The male connector will be terminated on the Control Panel end of the Power Insert Cable to be connected to the Control Panel, and a female connector will be terminated on the Trunk Cable end of the Power Insert Cable to be connected to the Trunk Cable via a Power Insert Connector.

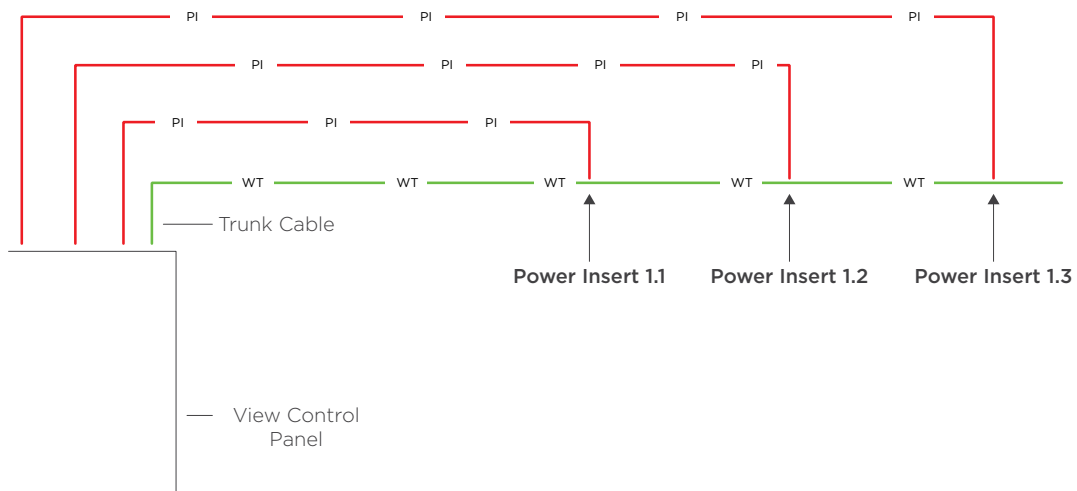
The Interconnect Drawings will provide specific details on where the Power Insert Cable is to be inserted within the system.



## Installation

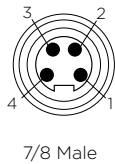
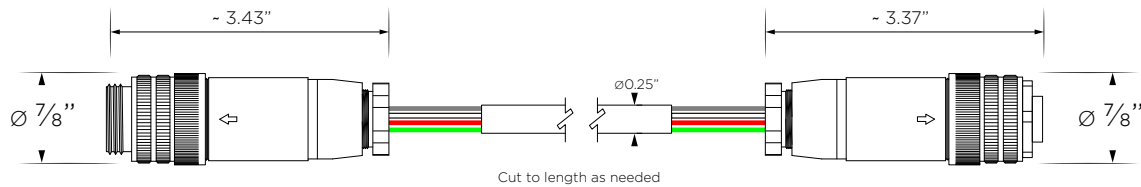
### Step 1: Power Insert Cable Identification

1. Locate the Power Insert Cable inside the interconnect drawings. Each Power Insert Cable will be identified by a number if more than one is required.

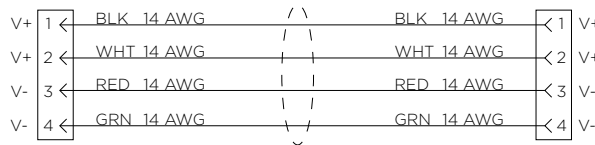


## Step 2: Route the Power Insert Cable

1. Run the appropriate length of Power Insert Cable from the Control Panel to the insert location identified on the interconnect drawings.
2. Field terminate the cable ends as detailed inside the interconnect drawings.
3. Perform a visual check on all conductors making sure colors are correctly terminated on each connector (i.e. Black to Black, White to White, Red to Red, Green to Green).
4. Perform a visual check on all conductors to ensure wire stripping is correct, no loose strands of copper and the conductor is fully seated into the connection points.
5. Label each end of the Power Insert Cable to correlate with the interconnect drawings.

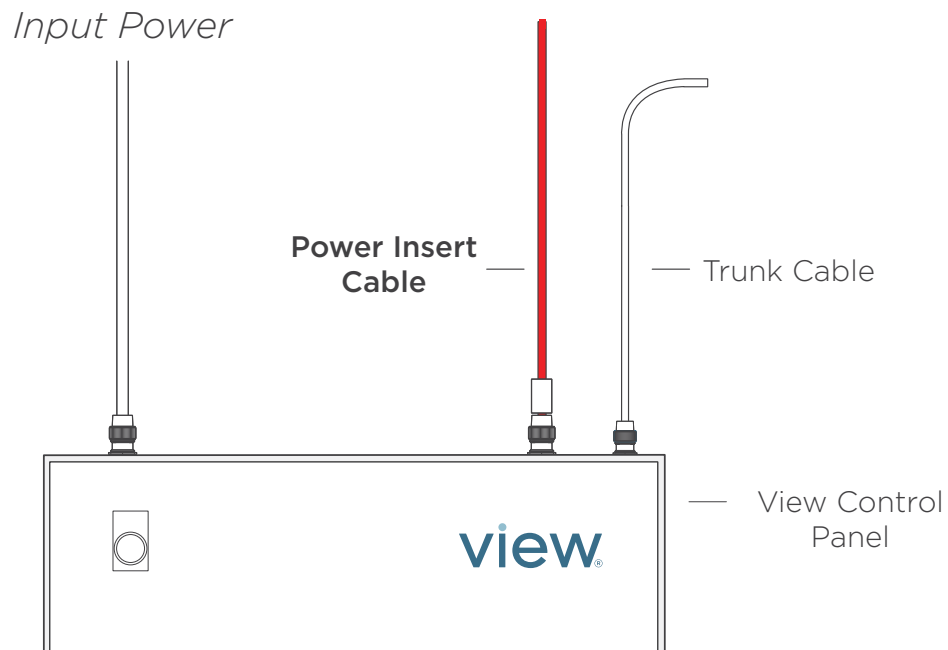


Wiring Diagram



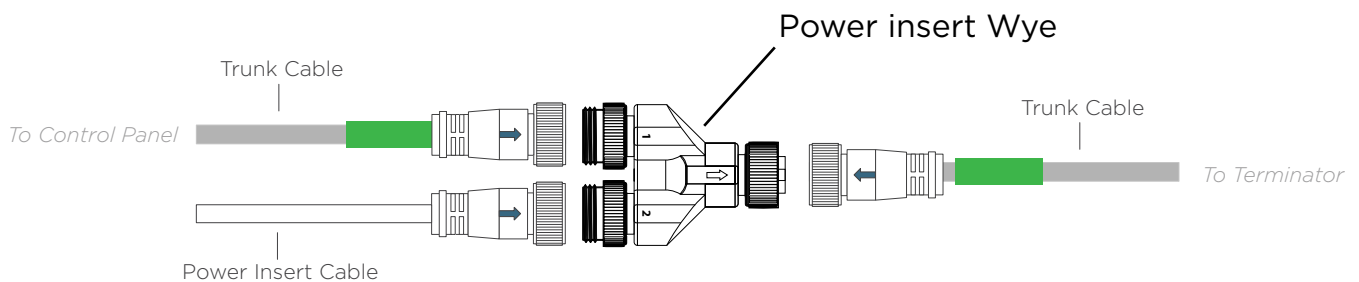
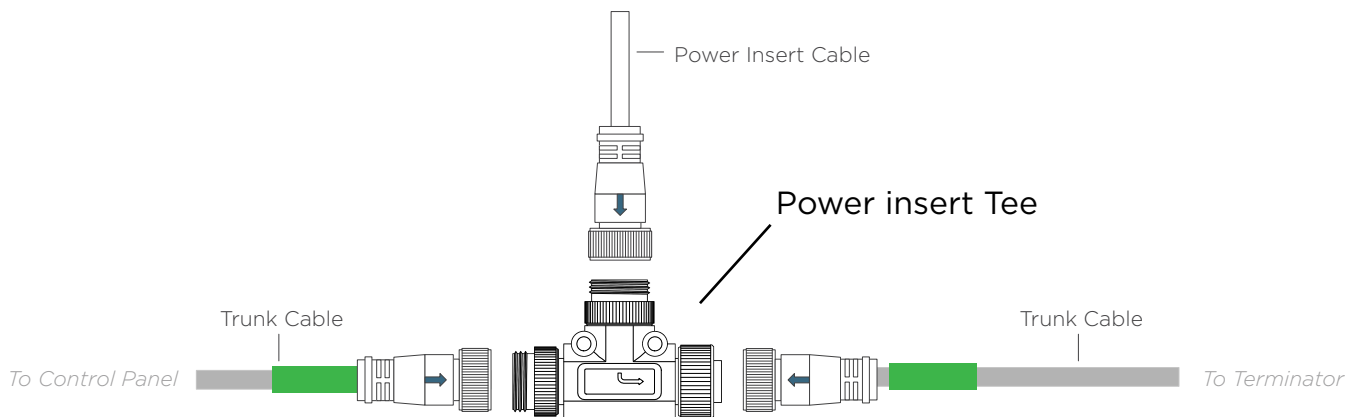
### Step 3: Connect to Control Panel

1. Warning: Make sure the power is turned off to the Control Panel.
2. Install the terminated male end of the Power Insert cable to the Power Insert port on top of the Control Panel.



## Step 4: Connector and Cables installation

1. Install the Power insert TEE or Power insert WYE connector depending on what is required inside the interconnect drawings on the end of the Trunk Cable.
2. Connect the terminated female end of the Power Insert cable to the power insert connector.



## Common Errors

1. The Power Insert cable is installed in the wrong location. For example, the Power Connector Tee is installed in the wrong location which does not align with the requirements of the Interconnect Drawings.
2. Field termination may be improperly wired which results in shorts. This can cause damage to the system.
3. You may find loose copper strands that short out to other connection points. Verify there are NO loose copper strands shorting out between connection points.
4. Individual conductors may not be fully seated into the connection points. Perform a pull test to make sure all strands of the conductors are pushed down and fully seated into each connection point.
5. When numerous Power Insert cables are required, in many cases they are not labeled which makes it very difficult to troubleshoot. Please be sure to label all Power Insert cables.