

# Industrial Field Wiring Tips and Tricks

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[0m:0s]



[0m:4s] Hi I'm Josh Bloom, welcome to another video in the RSP Supply education series. If you find that these videos are helpful to you, it certainly helps us out if you could give us a big thumbs up and subscribe to our channel.

[0m:15s] In today's video, we are going to be discussing electrical wiring. More specifically, we are going to be talking about wiring in industrial applications and terminating wires at devices and instruments in the field as well as any terminations made in a control panel.

[0m:34s] Anyone who has done electrical work in the field can tell you it is typically much more difficult than wiring in a controlled environment like a panel shop for instance.

[0m:45s] Field wiring typically requires more time and patience and the ability to troubleshoot problems on the fly safely and efficiently.

[0m:55s] For the purpose of today's video, we are going to be focusing on industrial applications where you might encounter a lot of different devices and instruments all being terminated, monitored, and controlled by a central control panel. This type of work can be very difficult as there are commonly many different devices with several different points on each device that needs some type of control or monitoring ability.

[1m:24s] It is very easy to get confused and make mistakes. Today I'm going to share with you some best practices that can help make this field wiring much easier and provide safer, more consistent results.

[1m:39s] First thing is first: proper wire labeling is critical to field wiring success.



[1m:46s] With the amount of wires that can be pulled on a single job site, having wires labeled improperly or not at all can make this work almost impossible and will greatly increase the amount of time and stress you put on yourself and those working around you.



[2m:3s] It is critical to make sure that each wire is labeled with a unique number or letter so that it does not get confused with other wires on the job site.



[2m:13s] Proper wire labeling can greatly increase the efficiency of your work and make life much easier for those terminating those wires.

[2m:22s] The next thing to consider when wiring in this type of environment is to make sure any wires that are getting pulled to or from instruments to the control panel is that the wires be identified so that they correspond with the devices on the engineer's electrical drawings for that job site.

[2m:42s] For instance, if you are pulling wire from a starter motor to the control panel and that starter motor has a few different IO points that the control panel is either operating or monitoring, it is important that the wires correspond to the schematics so that they can be landed in the control panel in the proper location.

[3m:6s] The drawings often use tag names, or terminology, that may not make much sense but will be identified somewhere on the drawings and will correspond with specific signals that are being picked up by the PLC in the control panel.

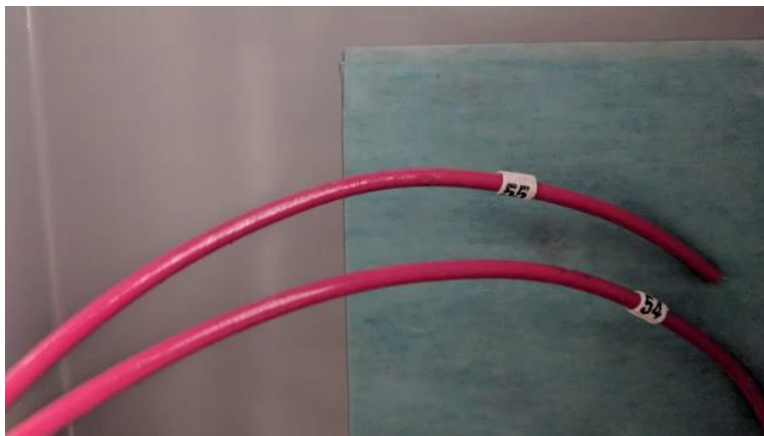
[3m:22s] Something else to consider when wiring in the field specifically in the control panel. It is a good idea to leave yourself as much wire as possible when making these terminations. It is very common to see more wire pulled into the panel than is actually necessary. Instead of cutting this wire to the exact length that is needed,

[3m:44s] it is best practice to leave extra wire at the bottom of the enclosure so that if a mistake is made at some point, there will be enough wire in the panel to correct the problem without having to pull more wire to the panel.





[4m:0s] Also, when cutting your wire to length, it is a good idea to move the wire, identifying labels to another location on that same wire instead of cutting them off.



[4m:13s] This allows you the ability to come back at a later point and troubleshoot any problems with much more ease due to the fact that you can more easily identify each wire in the panel as it corresponds to that same wire at the device or instrument termination points.





[4m:32s] Lastly, it is a good idea to keep your job site as clean as possible throughout the installation process. By keeping your job site clean and organized, it becomes



[4m:45s] easier to work more efficiently, enabling you to reduce the amount of mistakes you make along the way.



[4m:52s] It seems like a simple thing but it can make a huge difference. When doing any kind of field work.

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