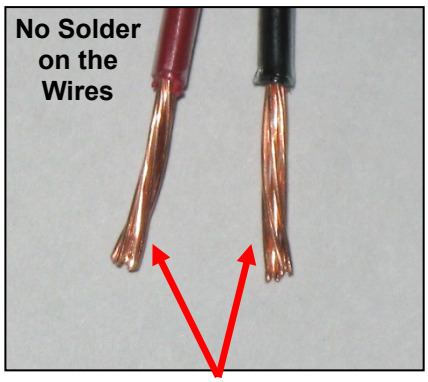
Tinning Wires / Solder Creep – Basic Notes and Information

Tinning makes for a cleaner, smoother soldering process. See Notes / Example below.

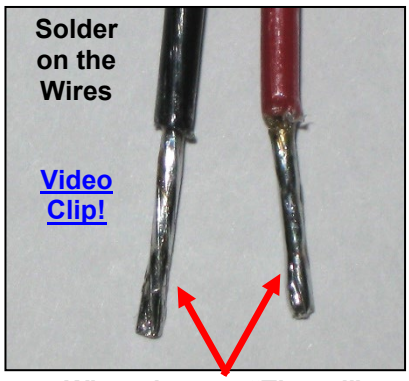
What is Tinning?

Tinning is a procedure that helps prepare a wire or connection for final soldering. A wire is usually tinned to keep all the strands together, and a connector lead is tinned to allow the wire to easily solder to it. Tinning helps to create a smoother, more reliable, and professional soldering process.

How to Tin Low Voltage Wires - Video Clip!



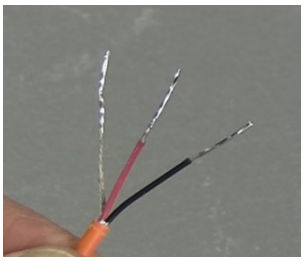
Wires that are not "Tinned"



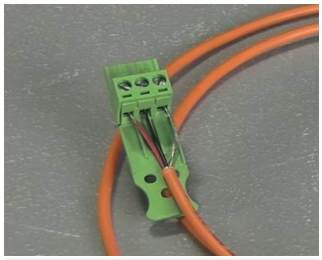
Wires that are "Tinned"

What is Solder Creep?

As it pertains to Audio – Solder Creep occurs when a "tinned" wire is subjected to stress after a long period of time. For example: Let's say you are using a "Crimp Type" Terminal Block or Euroblock (Phoenix) connector, and you happen to "Tin" the wire before crimping. Once you "Crimp" down on the "Tinned" wire, the downward pressure that the crimp/screw produces will eventually lower the crimp's reliability. These "Tinned" wires will "Flatten Out" and eventually slowly "creep" out of the terminal block/connector. The wire "may or may not" comes out immediately, but it can also create an intermittent connection (being loose in the crimp area). I've never read where a manufacturer recommends tinned wires be used in any crimp termination. It is best practice to never "Tin" a wire you will use for any crimp termination. It's best to twist the wire strands together and crimp the connection (without tinning).

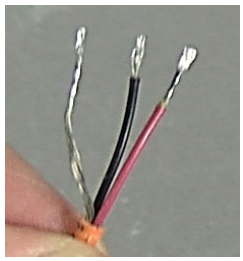


Example: Here are some wires that have been "Tinned" before being installed in a Euroblock (Phoenix) connector.



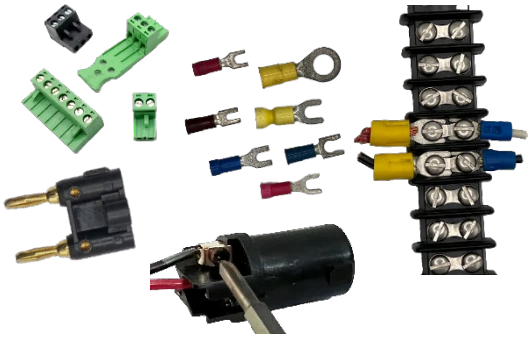
Wires have been terminated (crimped) and in the Euroblock connector.

Video Clip!



Notice how the wires have "Flattened" out after being removed.

Solder Creep can potentially occur on any of the devices shown below. Do not "Tin" any kind of "Crimp" termination.



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