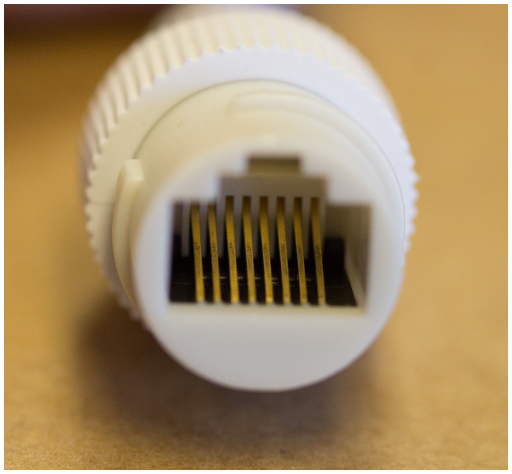
Technical Guide 8-3-16
RJ45 Camera Corrosion

Weatherproofing your ethernet (RJ45) connector plays a key role in keeping your camera working reliably through the years. Corrosion caused by improper weatherproofing or failure to weatherproof is not covered under warranty. For more information on protecting your connector check our weatherproofing section in the Quick Start Guide - http://www.security-camera-warehouse.com/downloads/SCWQuickStartGuide.pdf

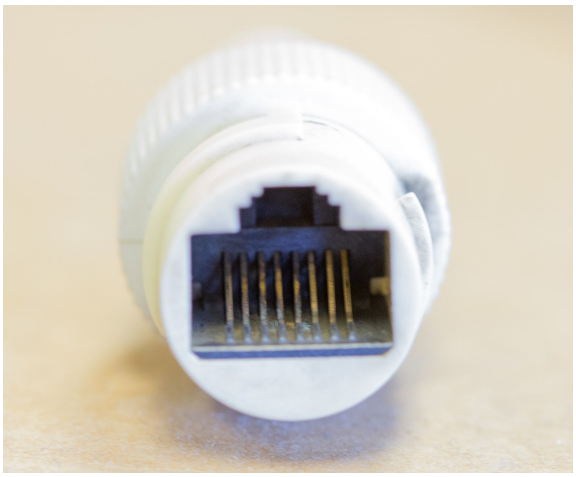
Corrosion Symptoms

Corrosion can cause cameras to work sporadically, disconnect and reconnect, disconnect completely, or other similar issues. Corroded connectors can also be finicky, the slightest movement can cause a pin to lose contact with a pin on the ethernet cable.

If you are experiencing these issues the next step would be to physically inspect the connector. Corrosion can be easily be seen in the connector. They'll often be green, black, or dark brown inside on the connectors rather than gold. Longer term corrosion can also cause pins to bend down as the corrosion eats away at the metal and it loses strength.



Normal Connector



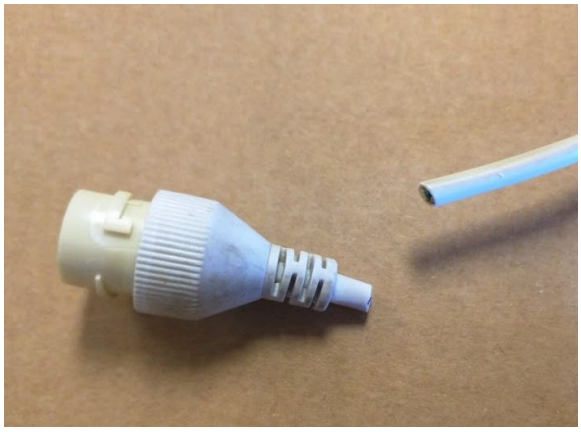
Corroded Connector

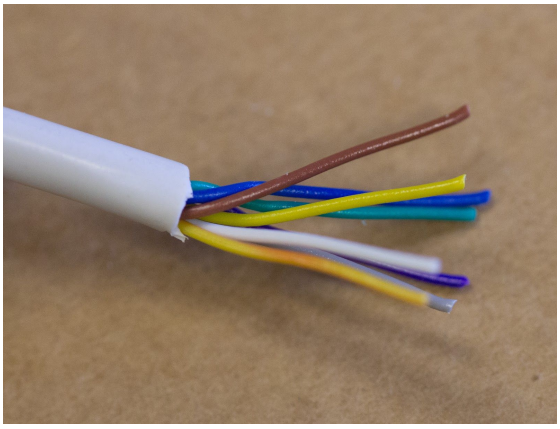
Corrosion Repair

If corrosion is caught early a simple cotton swab and ~91% Isopropyl Alcohol (rubbing alcohol) may be enough to clean the connector of corrosion. In some slightly more advanced situations more connector robust contact cleaning solutions may be used.

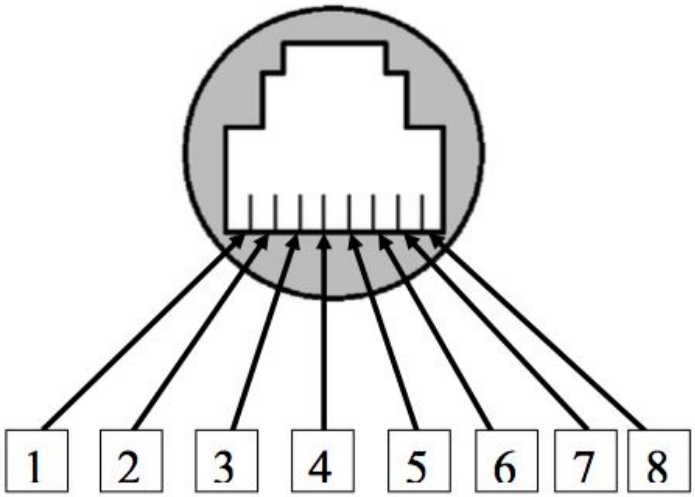
In critical cases of corrosion the only way to save the camera is to replace the connector. There is no way to replace it with a “stock” connector and cutting the connector will void the warranty, however in most situations this is the only way to save the camera.

Replacing Connectors



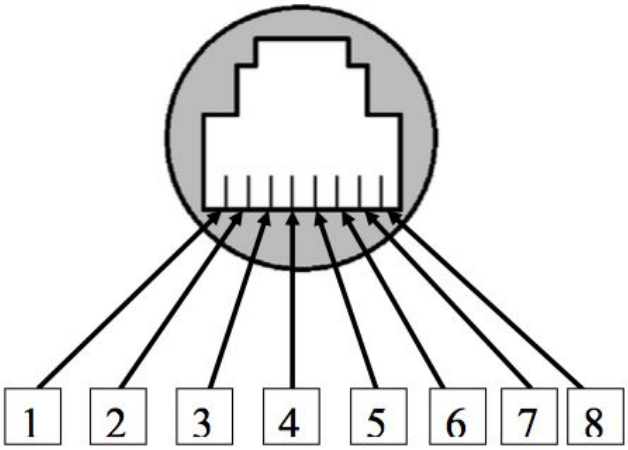


The first step is to cut the the connector off, exposing the pairs. In some cameras the color of the jackets may be different than the standard Cat5/6 pairs, others may be the same. Below are a few of our common models.



	Camera Wire Color	T568A	T568B
1	White		
2	Brown		
3	Blue		
4	Grey		
5	Purple		
6	Green		
7	Yellow		
8	Orange		

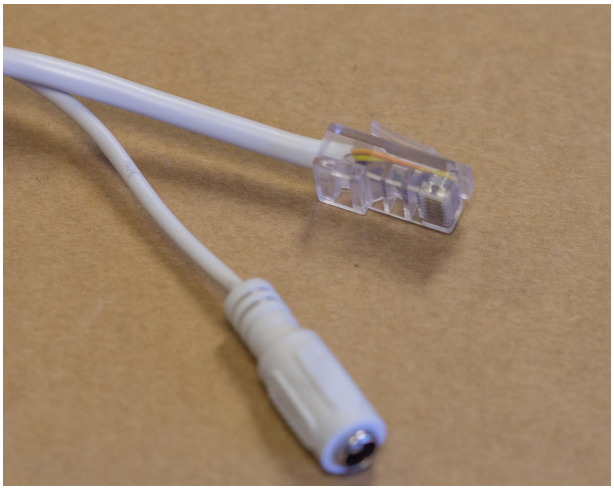
Guardian and Wasp (note the white wire)

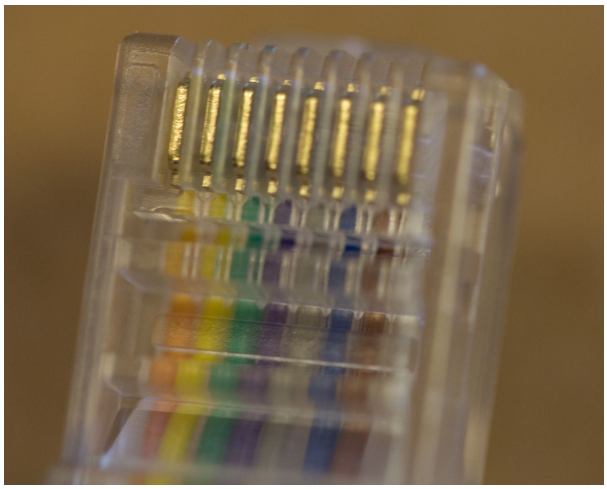


	Camera Wire Color	T568A	T568B
1	Purple		
2	Blue		
3	Orange		
4	Green		
5	Yellow		
6	Red		
7	Brown		
8	Black		

Warden and Hornet (note the black wire)

Correspond the colors with the 568B and crimp it like a normal RJ45 end. If you need assistance with this step - check our crimping section of the Quickstart Guide. You will need a female to female coupler in order to connect it to another ethernet cable.





Weatherproofing New Connector

Once you have crimped your new end on the camera, it's time to weatherproof the connector. Due to the fact that the connector is now male, the stock weatherproofing kit that comes with the camera will no longer work with it.

There are a few solutions you can use to ensure the camera remains weatherproof.

Junction Box

Using a small weatherproof junction box is the easiest and best way to weatherproof connections. A junction box can be purchased from many home improvement store and are essentially plastic cases around the connectors. Be sure to use weatherproof silicon to seal any gaps

Female to Female Couplers (Weatherproof)

One option to keep a more stock look and appeal to the camera is to use a weatheproof female coupler. These kits vary depending on the manufacturer but generally work any standard weatherproofing kit. Check instructions with the weatherproof kit - usually these have to be put on before putting the RJ45 connector on the camera.

Below is an example we used. Note: The other end of the ethernet cable needs the weatherproof connector as well.