

## RJ 45 ETHERNET AND VIDEO BALUN WIRING CONFIGURATIONS

Please use the below wiring guides for correctly crimping your Category rated cable to an RJ45 connector for accurate positioning of colour coded cable cores which can differ depending on the equipment that is being connected.

## STRAIGHT THROUGH METHOD

This method is used when you are connecting a digital video recorder to a network switch, hub or directly to a modem router, it is currently the most common way of connecting you DVR to a network allowing remote connectivity to the DVR from all computers on the local network and for connectivity from a remote location when connected to a correctly configured modem/router. This configuration is also used when using any of our video baluns or VGA baluns that incorporate the RJ45 connector.



**NOTE :** The straight through method wires both ends like for like so both RJ45 connectors will look identical in terms of the colour coding of pins as shown in above diagram.

## **CROSS OVER METHOD**

This method is used when you are connecting a single PC or laptop to a digital video recorder, it is the simplest method of controlling a DVR via a remote connection and would only be used when just one computer will ever access the recorder from a local connection, it is also used when you are connecting two network hubs or switches together and when connecting two separate computers for communication on a network.



**NOTE :** The cross over methods switches pins 1 & 2 (green/white & green) with pins 3 & 6 (orange/white & orange) as shown in above diagram.

## **FINAL NOTE**

100BASE (100Mb) Ethernet ports only use 2 pairs ( 4 cores) of the category rated cable, pins 1 & 2 (orange/white & orange) and pins 3 & 6 (green/white & green) where as a 1000BASE (Gigabit) Ethernet port uses all 4 pairs (8 cores) because of this great care is needed in ensuring all cable cores in both RJ 45 connectors are perfectly terminated and in the correct order when using the Gigabit interface, if not communication will not be established.