

### F Type Male Quick Connect Balun

#### Application Note:



**Quick Connect Video Balun  
F Male to IDC  
Part Number: E10190C**

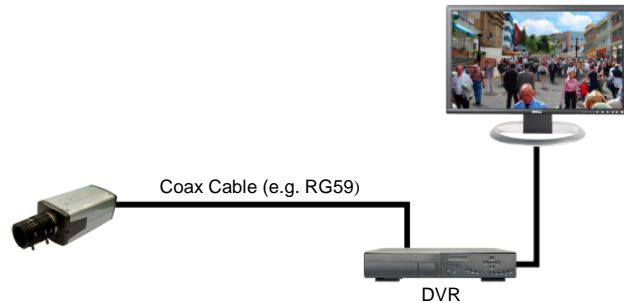


**Rear View showing IDC**

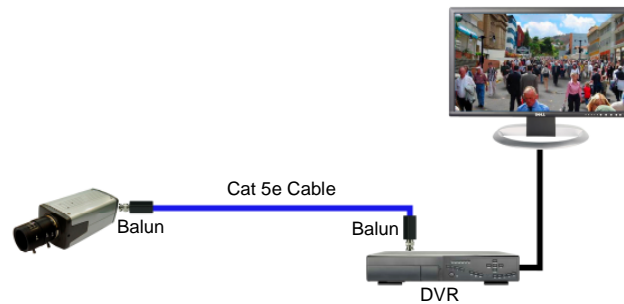
Traditionally, coaxial cables such as RG59 are used for connecting the CCTV camera video to the DVR but now it is possible through use of EQL's Passive Video Balun (Coax to Cat 5 Converter) to replace the more expensive coaxial cable with Cat 5 cable for this purpose. To convert from coaxial cable to the newer Cat 5 twisted pair cable is a very easy process and simply involves use of a video balun at the camera end and another video balun at the DVR end and interconnecting the two baluns with Cat 5 cable.

With Cat 5 cabling it is possible to connect the camera up to distances of 500 metres from the DVR with negligible degradation to the image quality.

With F Male this is normally used for cameras with F Female as the video output connection. This application is shown below.



**Coax Cabling Method**



**Cat 5 Cabling Method**

\* Balun type to suit installation eg E10180C, E10180R or E10180T

#### Specifications:

Bandwidth:	DC to 8MHz
Insertion Loss:	< 1.5 dB to 8MHz
Impedance:	75 ohm Coaxial, 100 ohm RJ45
Maximum Signal Voltage:	1.1 Vp-p
Return Loss:	> 15 dB to 8 MHz
Common Mode Rejection:	>40 dB @ 8 MHz
Temperature Range:	0 to 55 °C operating, 95% Relative Humidity
Casing:	Fire Retardant Plastic ABS UL 94V-0
Maximum Distance:	Color: Up to 4500 m Cat 5e B&W: Up to 600 m Cat 5e

Note: Specifications subject to change without notice.

### EQL Teleconnect

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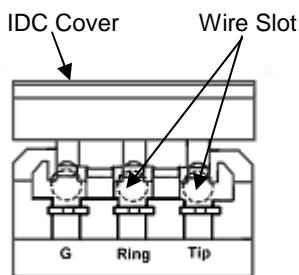
Tel: +61 2 9824 5680  
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ABN: 93 098 402 218

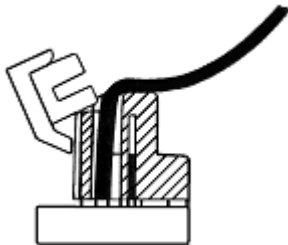
## TERMINATION PROCEDURE FOR CAT 5 CABLE TO QUICK CONNECT VIDEO BALUN IDC



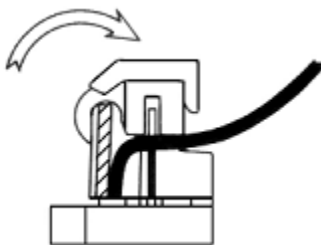
**Quick Connect  
Video Balun**



**Figure 1**



**Figure 2**



**Figure 3**

### **Step 1**

Strip Jacket of Cat 5 Cable approximately 15 mm from end to be terminated.

### **Step 2**

Fan out twisted cable pairs and select pair of Cat 5 Cable to be terminated onto the Insulation Displacement Contact (IDC) and select pair to be used.

### **Step 3**

Open cover of Quick Connect Video Balun

### **Step 4**

Open IDC Cover which also doubles as a cable insertion tool for the cable to the IDC.

### **Step 5**

Fully insert solid colour wire eg Orange into wire slot marked "Tip" see Figure 1

### **Step 6**

Fully insert striped coloured wire eg Orange/White into wire slot marked "Ring" - see Figure 1

### **Step 7**

Bend and lay each wire into their corresponding IDC terminal – see Figure 2

### **Step 8**

Close IDC Cover until there is a "Click" sound to ensure the wires are properly inserted into the IDC. – see Figure 3.

### **Step 9**

Close Balun Cover to complete termination.

### **Step 10**

Connect Balun to equipment

### **Note:**

The G terminal is not connected.