

Dericam H206C Outdoor IP Camera Mod's



210-230 mA w/ IR LED's OFF and 510-530 mA w/ IR LED's ON at 12V DC.
No Network IR LED or IR Cut Filter operation. Control is by photocell only.

Camera PCB1 (HCam4): HD5_38_VC, PCB-04, E305283

Camera PCB1 (HCam5): HD5_38_VB

J4 - a 2-pin Jack to I.R. Cut Filter

J3 - a 3-pin Jack with S, Gnd & +12V to I.R. Board

J5 - a 3-pin Jack with NC, Gnd & Color

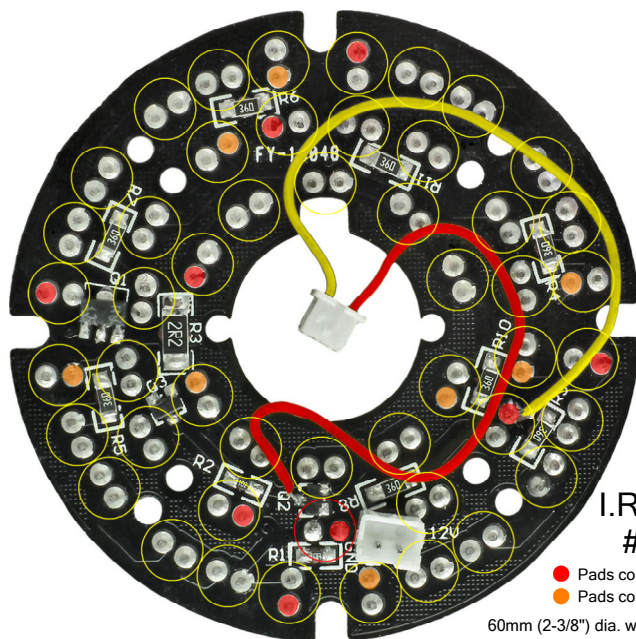
Camera PCB2: IPC 38 VC

J9 - an unused 4-pin connector

J13 - space for a 4-pin connector

POE PCB3 (HCam4): ONV-PD-IPA Ver 1.1

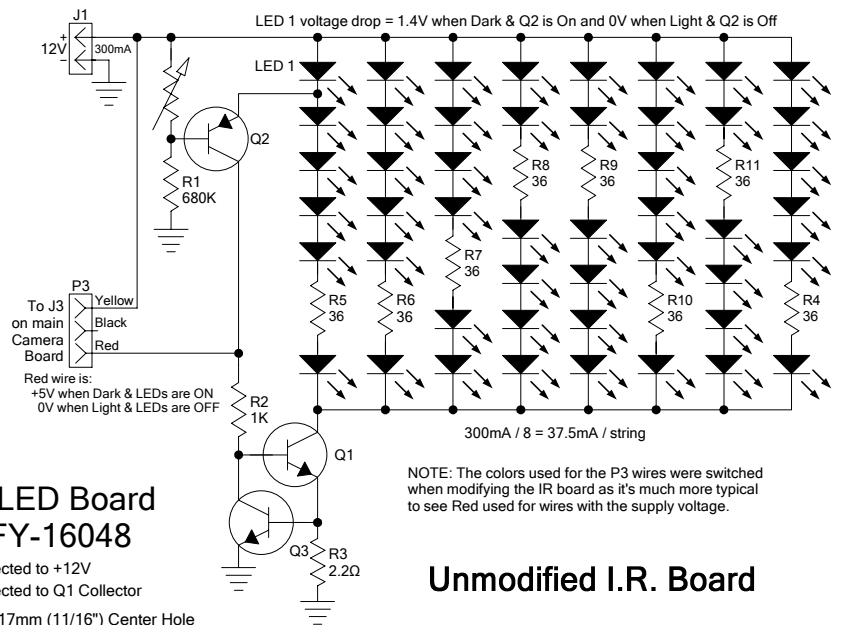
POE PCB3 (HCam5): ONV-PD-1PS Ver 1.1



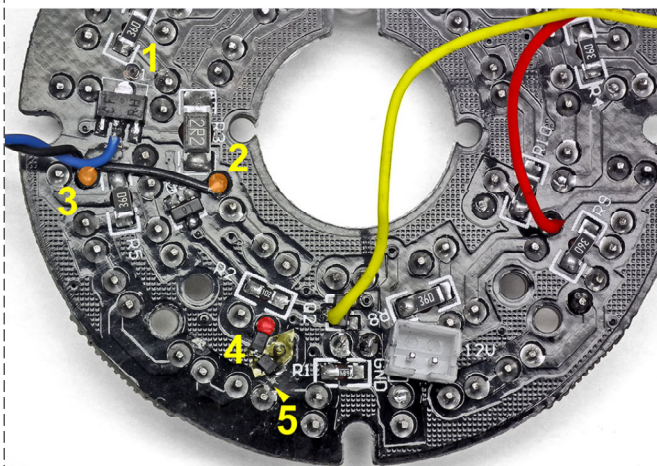
**I.R. LED Board
FY-16048**

● Pads connected to +12V
● Pads connected to Q1 Collector

60mm (2-3/8") dia. with 17mm (11/16") Center Hole



Unmodified I.R. Board

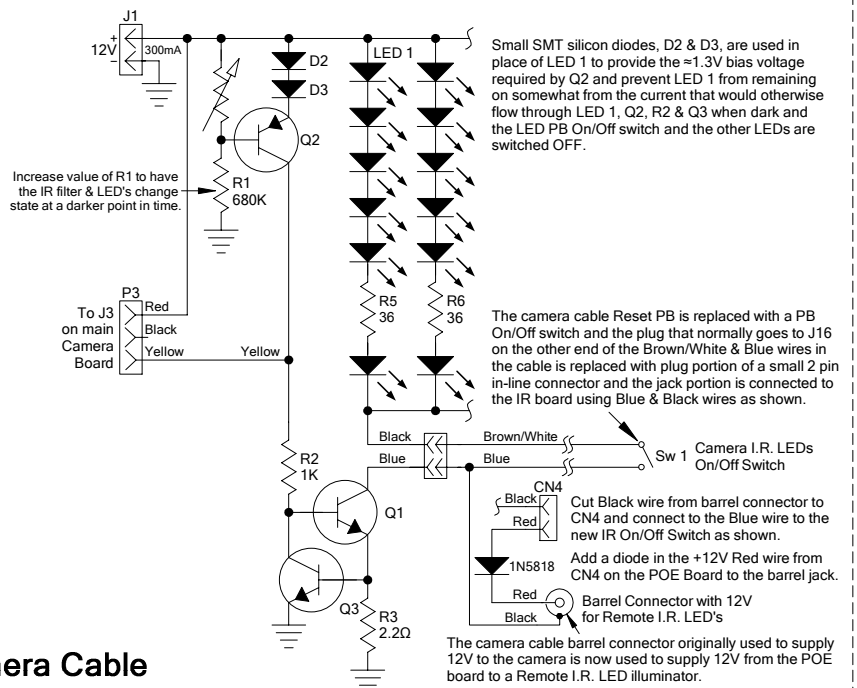


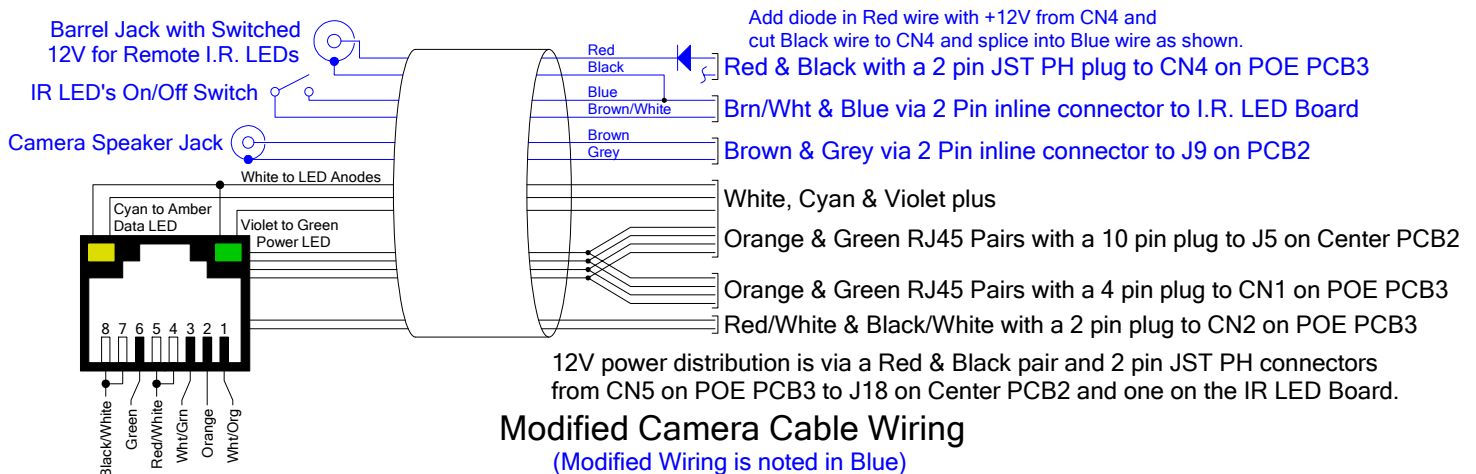
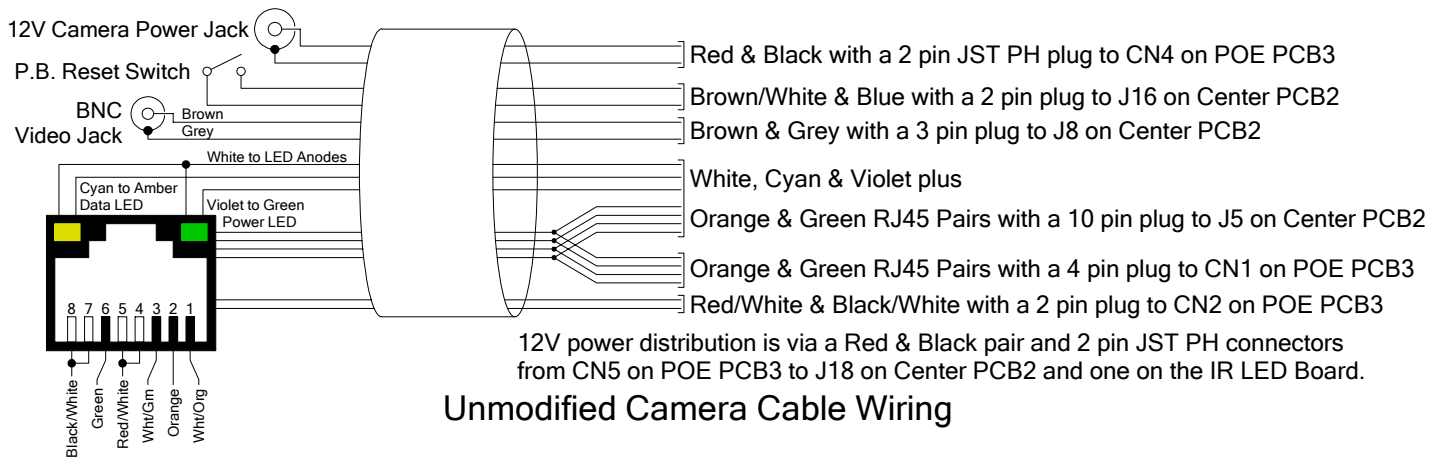
● Pads connected to +12V ● Pads connected to Q1 Collector

FY-16048 I.R. LED Board

60mm (2-3/8") dia. with 17mm (11/16") Center Hole

Modified I.R. Board & Camera Cable





Camera Modification Outline

Camera Cable Mod's - On Camera End

1. - Replace the 3 pin plug on the Brown & Grey wires with a 2 pin inline connector plug.
2. - Remove the 2 pin plug on the Brown/White & Blue wires.
 - Cut the Black wire to the 2 pin JST PH connector and splice it into the Blue wire.
 - Install a 2 pin inline connector plug on the Brown/White & Blue wires.
3. - Install a diode in the Red wire to the 2 pin JST PH connector.

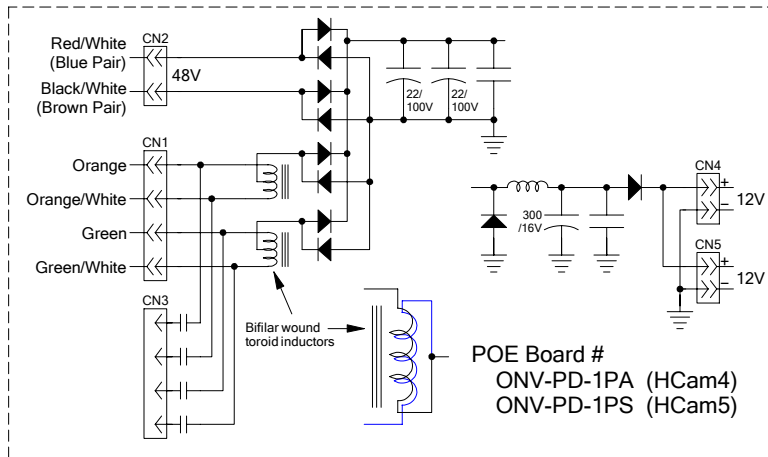
Camera Cable Mod's - On RJ45 Connector End

4. - Cut off the Momentary Action Push Button Switch $\approx 3"$ from where the wiring is split off from the main cable and replace with an Alternate Action Push Button Switch.
5. - Likewise, cut off the BNC connector and replace with an inline jack for connecting a speaker. (Cutting the switch and connector off $\approx 3"$ from where their wiring is split off from the main cable leaves them with long enough leads to make them still usable for other projects).
6. - Label the Cable Barrel Connector "Switched 12V for Remote I.R. LED's",
 - label the PB Switch "Camera I.R. LED's On/Off" and
 - Label the speaker jack "For Camera 8 Ω Speaker".

IR LED Board Mod's - Refer to the Modified IR Board image on page 1.

1. - Unsolder the Red & Yellow wires from the IR board and swap the positions of the wires in P3.
 - Solder the Red wire to where the Yellow wire had been soldered and solder a new Yellow wire where the Red wire had been.
 - Connect the new Yellow wire and the Yellow wire from P3 to a 2 pin inline connector plug.
2. - At location 1, use a 5/64" dia. drill bit to remove the annular ring from and sever the PCB via connecting the collector of Q1 to the LED array connections on the other side of the board.
3. - At location 3, cut the PCB trace from the collector of Q1 (center pin) to the orange colored pin at location 3.
4. - Solder a blue wire to the collector of Q1 and a Black wire to the orange colored pins at locations 2 and 3.
 - Connect the other end of the Blue & Black wires to to a 2 pin inline connector plug.
 - Mark the plug and inline connector jack on the Blue & Brown/White cable wires in a way to know when they are properly connected with the Blue wire from the cable connected to the Blue wire from the collector of Q1.

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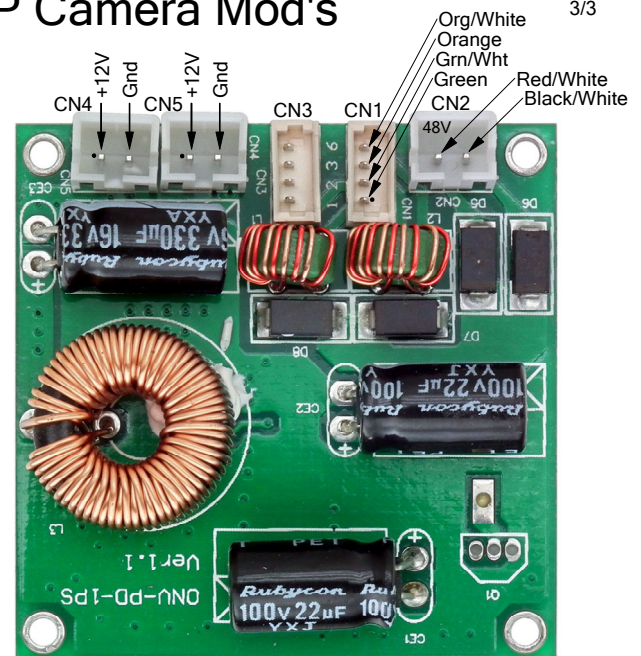


On PCB3 - CN2, CN4 & CN5 are JST 2mm PH connectors.

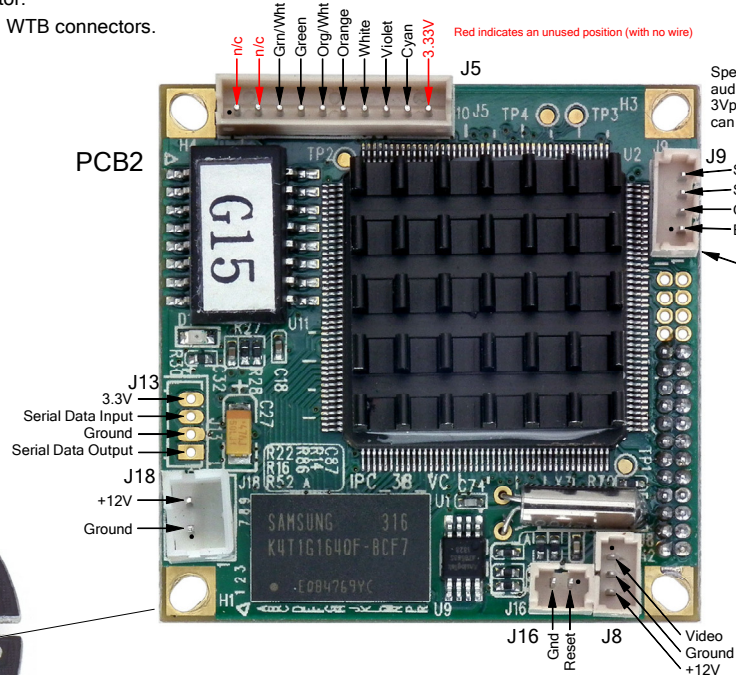
On PCB2 - J5 is a FCI 1.25mm WTB type connector, but with round pins and J18 is a JST 2mm PH connector.

Connectors are otherwise all FCI 1.25mm WTB connectors.

PCB3

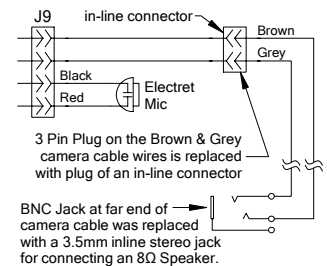


PCB2



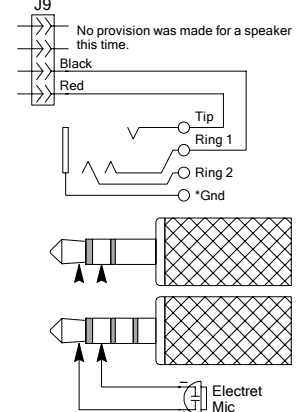
Speaker outputs are at 1.67VDC with 180° out-of-phase audio signals of up to 1.5Vp-p. With 0 VDC and up to a 3Vp-p audio signal between the outputs an 8Ω speaker can be connected between them directly.

A 4 pin FCI 1.25mm WTB jack is added on PCB2 and a mating plug is wired to an electret mic and the jack of a small inline connector as seen below.



The Tip & Ring connections were used to ensure neither speaker signal could make contact with the camera enclosure.

The 2nd camera was modified for an external mic using a 3.5mm 4-pole jack as seen below.



A 3 cct. stereo or a 4 cct. plug can be used for the mic.

* When the jack is installed in the cameras enclosure its ground terminal becomes connected to the camera ground through the metal enclosure.

PCB1

