COMPETITION DATA SYSTEMS
www.competitiondata.com

Sensor Connector Pinouts

Product Specification Sheet Rev: A Date: 6/07

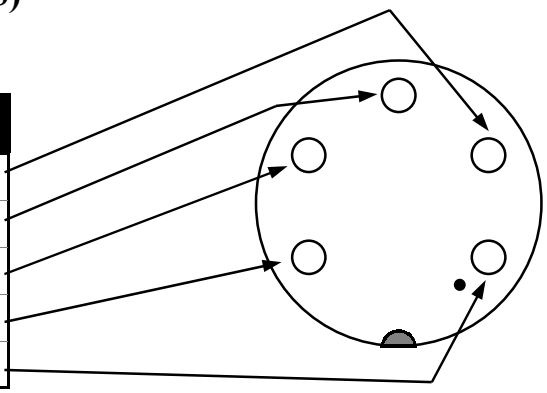
5 POSITION CONNECTOR

USED ON: All Single Channel Sensors* and Extension Cables

MALE HALF OF CONNECTOR (PINS)

USED ON: Sensors, Extension Cables

#	Usual Wire Color*	Description
2	RED	5 VOLT POWER
3	SILVER	SHIELD
4	WHITE	SIGNAL
5	BLACK	GROUND
1	GREEN	12 VOLT POWER

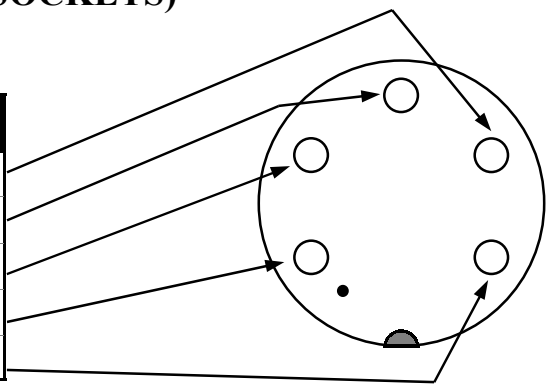


REAR VIEW OF CONNECTOR SHELL
(Where Pins are inserted, NOT the Mating Face!)

FEMALE HALF OF CONNECTOR (SOCKETS)

USED ON: Extension Cables, Junction Boxes

#	Usual Wire Color*	Description
4	WHITE	SIGNAL
3	SILVER	SHIELD
2	RED	5 VOLT POWER
1	GREEN	12 VOLT POWER
5	BLACK	GROUND



REAR VIEW OF CONNECTOR SHELL
(Where Sockets are inserted, NOT the Mating Face!)

*** IMPORTANT NOTE: Wire colors shown are for cables. Actual colors of wires used on sensors vary from sensor to sensor**

CDS WATERPROOF CONNECTOR PINOUTS & WIRING INSTRUCTIONS PAGE 2

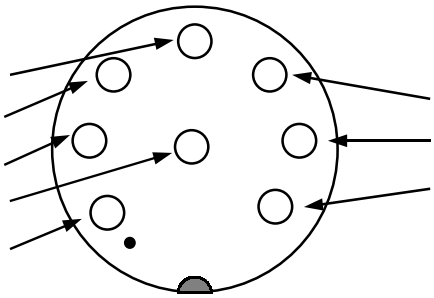
8 POSITION CONNECTOR

USED ON: Multi Channel Sensors* & Amplifiers, Multi Channel Extension Cables

MALE HALF OF CONNECTOR (PINS)

USED ON: Multi Channel Sensors, Multi Channel Amplifiers, & Multi Channel Extension Cables

#	Usual Wire Color*	Description
4	BLUE	SIGNAL #3
3	YELLOW	SIGNAL #2
2	PURPLE	SIGNAL #1
8	SILVER	SHIELD
1	BLACK	GROUND



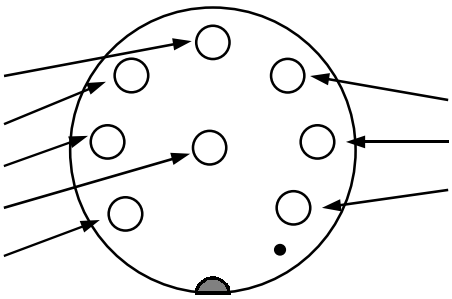
#	Usual Wire Color*	Description
5	ORANGE	SIGNAL #4
6	RED	5 VOLT POWER
7	GREEN	12 VOLT POWER

REAR VIEW OF CONNECTOR SHELL
(Where Pins are inserted, NOT the Mating Face!)

FEMALE HALF OF CONNECTOR (SOCKETS)

USED ON: Multi Channel Extension Cables

#	Usual Wire Color*	Description
4	BLUE	SIGNAL #3
5	ORANGE	SIGNAL #4
6	RED	5 VOLT POWER
8	SILVER	SHIELD
7	GREEN	12 VOLT POWER



#	Usual Wire Color*	Description
3	YELLOW	SIGNAL #2
2	PURPLE	SIGNAL #1
1	BLACK	GROUND

REAR VIEW OF CONNECTOR SHELL
(Where Sockets are inserted, NOT the Mating Face!)

*** IMPORTANT NOTE: Wire colors shown are for cables. Actual colors of wires used on sensors vary from sensor to sensor**

Switchcraft Field Repair Instructions (Crimp Style Connector)

1) Slide the following over the end of cable (in order)

a) Rubber boot

b) cable clamp

c) locking ring (Used on 8 socket and 5 pin connections.)

2) Slide the appropriate number of 1/4" diameter flexible dual-wall heat shrink tubing pieces onto the end of the cable to achieve an outside diameter of cable to between .230" and .265" finished dimension after shrinking. This diameter is where the strain relief of the connector will "bite", so it is important to complete the assembly of the connector while the heat shrink is still warm and pliable. It is best to not shrink the tubing until the end of step 8 (below)

Notes: a) For 4 conductor CDS supplied cable, use **two** 1" long pieces.

b) For 8 conductor CDS supplied cable, use **one** 1" long piece.

c) If you are working with different cable some experimentation may be required to determine how much heat shrink must be used to achieve the .230" to .265" dimension.

3) Strip outer jacket of cable .6" (6/10 of an inch)

4) Remove foil. Be sure to inspect the individual conductors to make sure they have not been cut.

5) Strip each 24 gauge wire .2".

6) Cover the bare drain wire with .3" of 1/16" clear flexible heat shrink. (This is **important** to keep other wires from shorting when connector is put together.)

7) Crimp pins or sockets onto conductors with a 4 point barrel type crimp tool. This is the same tool and positioner typically used on "lemo" connectors, and is available from CDS and others for about $ 375.00

8) Insert pins or sockets into connector housing. (See pin-out diagram.) Be sure to understand the diagram before inserting pins/sockets as they are not easily removed without doing damage to the wires)

9) Slide cable clamp into connector housing and squeeze locking tabs making sure they bite into build-up heat shrink to provide proper strain relief.

10) Slide rubber boot over connector housing.

Procedure Changes For Solder Type Connectors

Change step 5 (above) to: Strip each 24g wire .3". Lightly tin exposed wires with organic solder.

Change step 7 (above) to: Solder pins/sockets onto wires making sure conductors show through inspection hole.