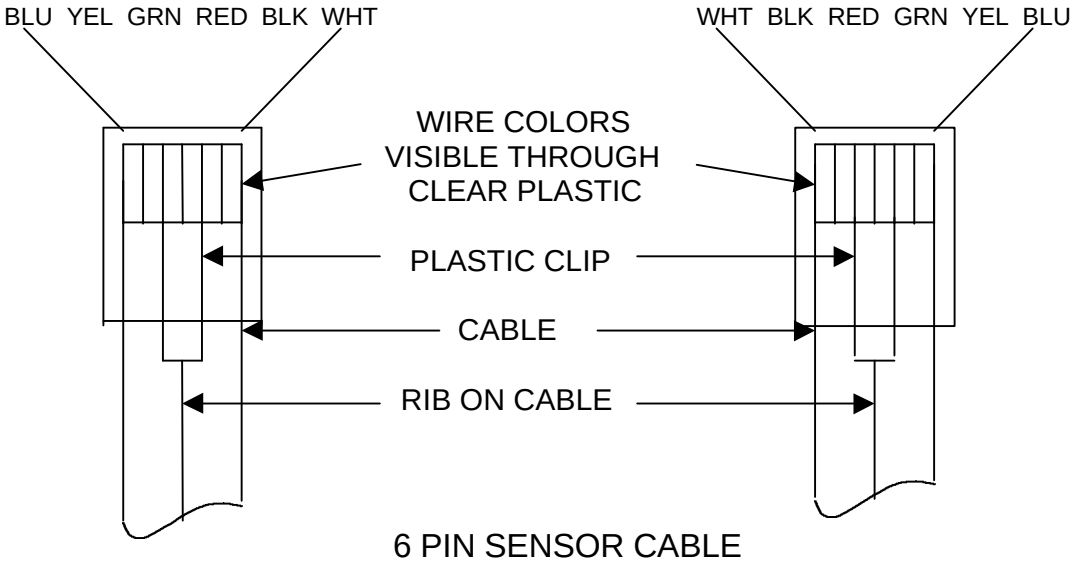
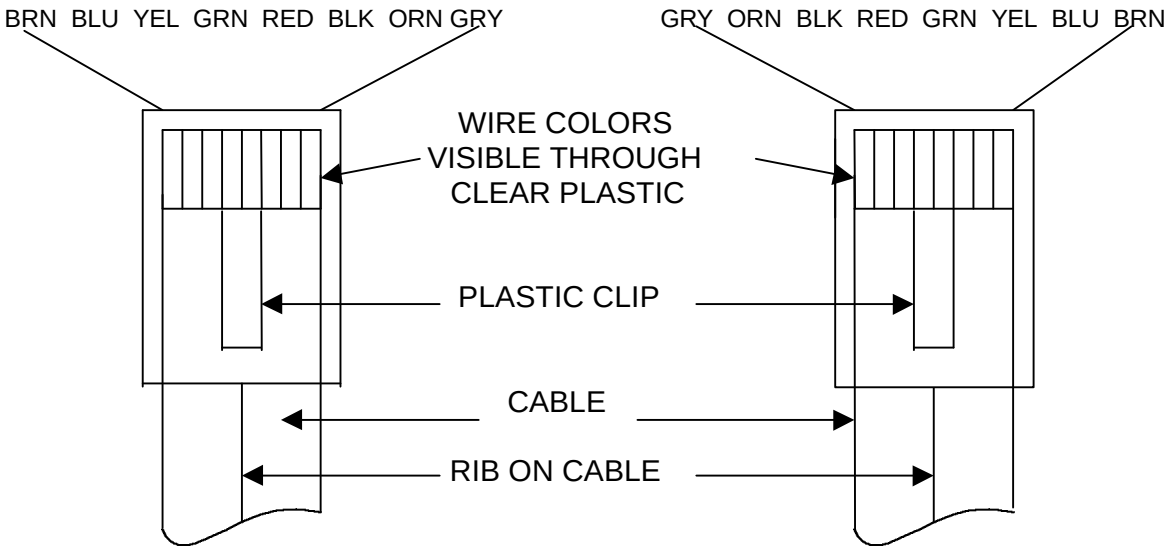
JR3 **SENSOR CABLES**

The cable for most JR3 digital sensors is a flat modular type cable with RJ-11 (6 pin) or RJ-45 (8 pin) modular plugs. JR3 digital sensors require a "standard" modular cable, as opposed to a "reverse" cable. The terms "standard" and "reverse" in regard to these cables are the cause of a great deal of confusion and misunderstanding. Therefore this sketch showing the wire arrangement at the 2 ends of our normal 6 wire modular cable is provided to define our cable. The 8 pin cable is similar with the addition of 2 wires. Either end of the cable can connect to the sensor or the receiver/processor.



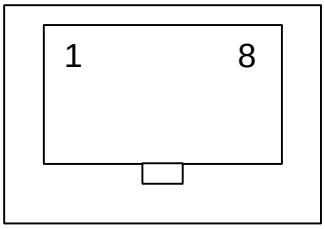
6 PIN SENSOR CABLE



8 PIN SENSOR CABLE

JR3
SENSOR and RECEIVER/PROCESSOR CONNECTORS

JR3 sensors use either a 6 pin, 8 pin or 10 pin modular jack depending on the model; receiver/processors use either an 8 pin or 10 pin modular jack. The jacks are designed to allow connection of a plug with fewer pins with no damage. When a 6 pin plug is plugged into the 10 pin jack only the central 6 pins are used. There are 2 unused jack pins on each side of a 6 pin plug. Similarly, an 8 pin plug in a 10 pin jack has 1 unused jack pin on either side. A sensor with an 8 pin or 10 pin jack requires use of an 8 pin cable. Although some JR3 sensors have 10 pin jacks only 8 pin cables are used for these sensors at this time. Note that there is a reversal of pin order between sensor and receiver/processor.



8 pin Sensor or Receiver Jack
6 pin and 10 pin jacks are similar

Sensor Jacks				Receiver Jacks	
6 PIN	8 PIN	10 PIN	Signal	10 PIN	8 PIN
		1	Cap. to Body	10	
	1	2	- 12 V	9	8
1	2	3	DCLK +	8	7
2	3	4	DCLK -	7	6
3	4	5	+ ~ 8 V	6	5
4	5	6	PWR COM	5	4
5	6	7	DATA +	4	3
6	7	8	DATA -	3	2
	8	9	+ 12 V	2	1
		10	N/C	1	

It is important to note that the pin order is reversed between the sensor and the receiver. Incorrect wiring is likely to damage the sensor and receiver.