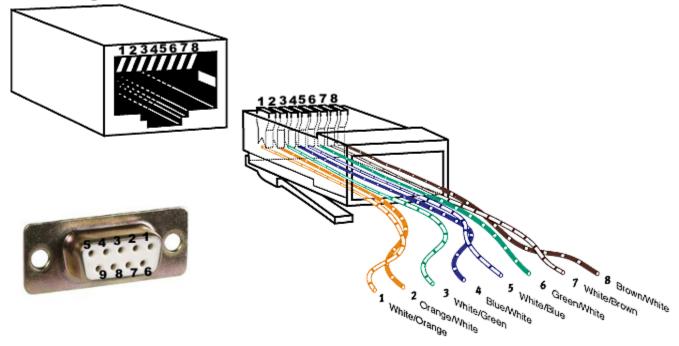
If a programming cable kit from Horner (Part number HE-XCK) is not an option for any reason, a serial programming cable can be made for any Horner OCS controller that has an RJ-45 "MJ1" programming port.

Pin numbering:



How to wire:

You'll need:

- 1. A standard, straight-through Ethernet cable
- 2. An RJ45-DB9F "Wire-it-Yourself" adapter as pictured.
- 3. A serial COM port on your computer OR, if one is not present, a USB-to-RS232 adapter. Most will work. Horner's does for sure and is part of the HE-XCK programming kit.
- 4. If needed, a straight-through 9-pin serial cable, male to female, as an extension or if the adapter doesn't fit directly into your built-in serial port.



Wire the adapter as follows:

Signal	RJ-45	9-pin D	Signal
TXD	8	2	RXD
RXD	7	3	TXD
GND	6	5	GND
		Short pins 4 & 6 on 9-pin side for official cable	

To connect your PC to the controller, plug one end of the Ethernet cable into MJ1; plug the other side into the adapter. Then plug the adapter into your PC's COM port.

Alternately, make a cable by chopping one end of an Ethernet cable off and soldering on a female DSUB connector using the pinout above.