Stalker Pro-II Radar Sensor Interface Cable Wiring Diagram

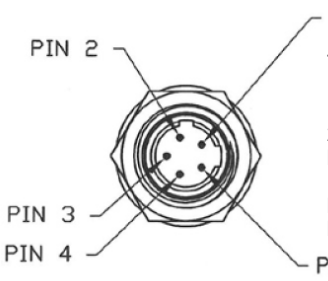
Hard Wired connection to connect the Stalker Pro-II radar sensor to the JUGS R2020 (DS7025SS) RJ-45 Input.

Alzatex, Inc.
6400 SW 213th Ave
Aloha, OR 97007
www.alzatex.com
terryl@alzatex.com
503 642-9693

Designed by Terry Lang

Cable Specifications:
Length: 12 feet

P2 - RJ-45 male connector.



This connector is part of a cable ordered from

Applied Concepts, Inc.
2609 Technology Drive, Plano, TX 75074-3750
Phone: 972-398-3750

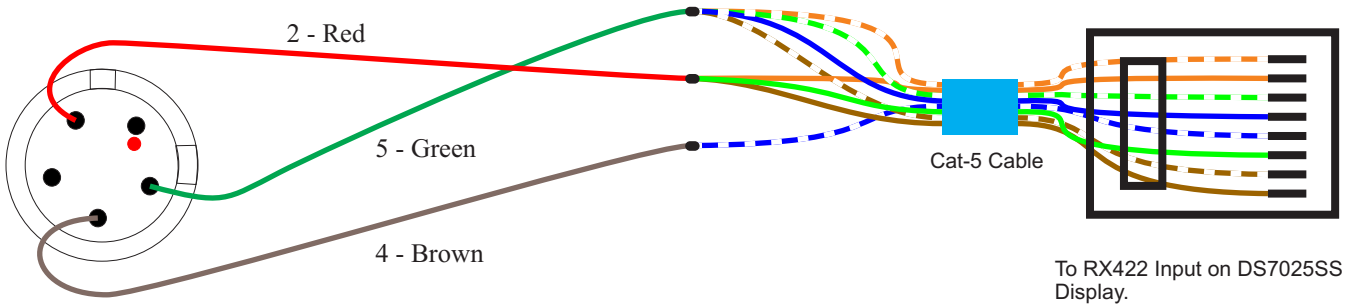
Part # 155-2223-00 Speed Sensor Cable with Power and I/O, HTS: 8544.42.0000

Pin 1 – RX – Receive Data – toward the Speed Sensor
Pin 2 – PWR – 12VDC (nominal)
Pin 3 – AUX – Auxiliary Input/Output
Pin 4 – TX – Transmit Data – from the Speed Sensor
Pin 5 – GND – Ground

The default RS232 parameters are 9600B 8N1 and the output string format looks like this (for 43.5 MPH):

000:		0000
043:		0435
043:	or	0435
043:		0435
000:		0000

In other words, 3 digits of speed value followed by a colon and a carriage return (0x0D) or 4 digits of speed value, with the last digit being a decimal fraction, followed by a carriage return (0x0D). Readings are continuously updated at about 3 times a second and are zero if no speed is detected.

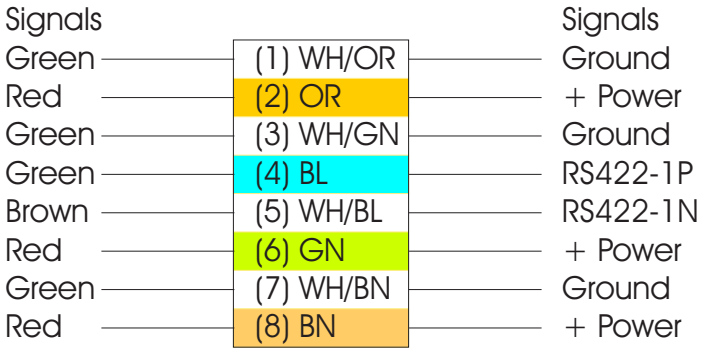


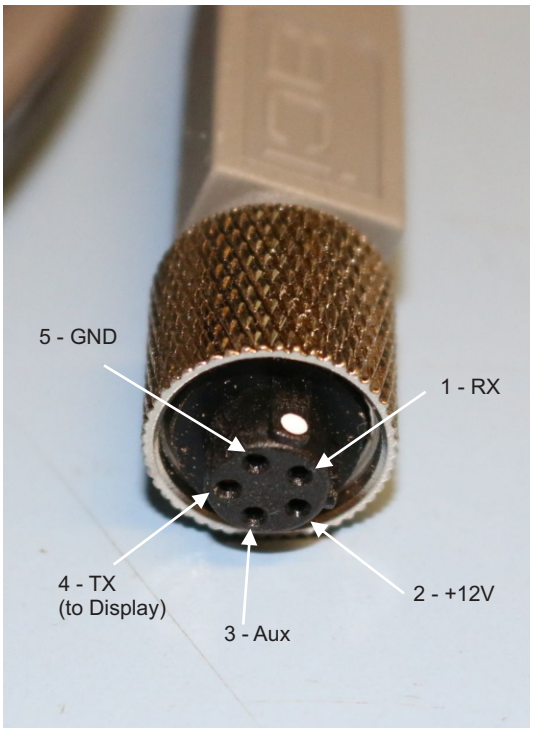
Front View of Male Connector

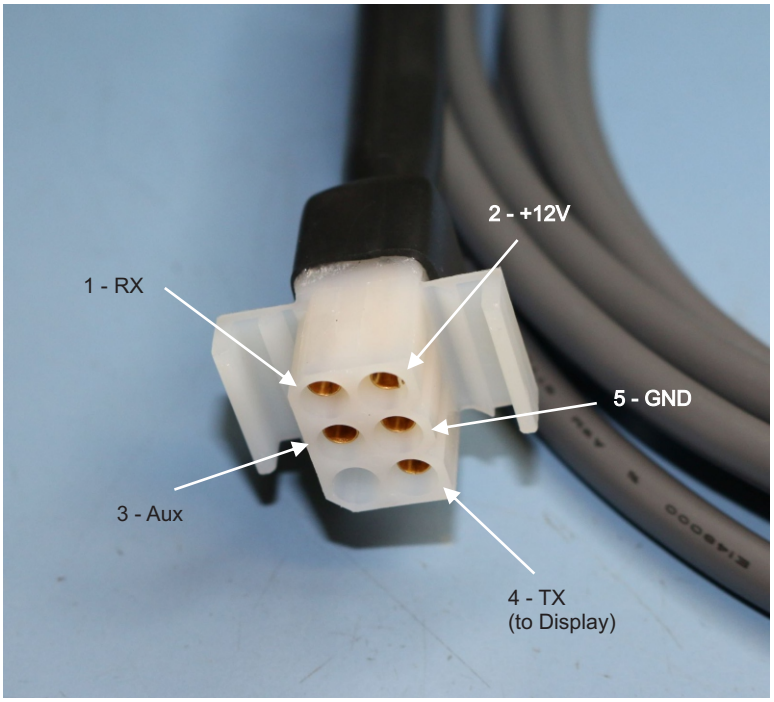
To RX422 Input on DS7025SS Display.

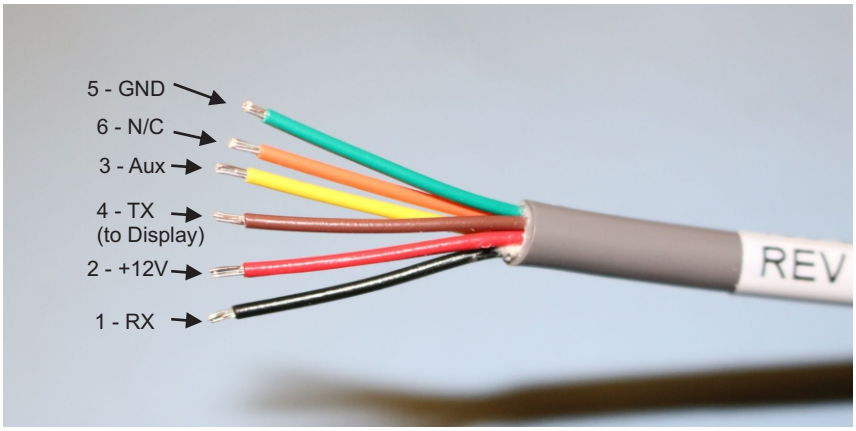
Label:

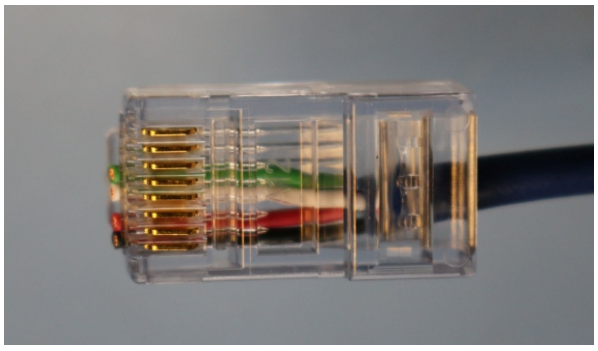
Stalker Pro-2 to R2020 Cable
Stalker Pro-2 Radar Sensor Interface Cable to connect to the JUGS R2020 radar display.

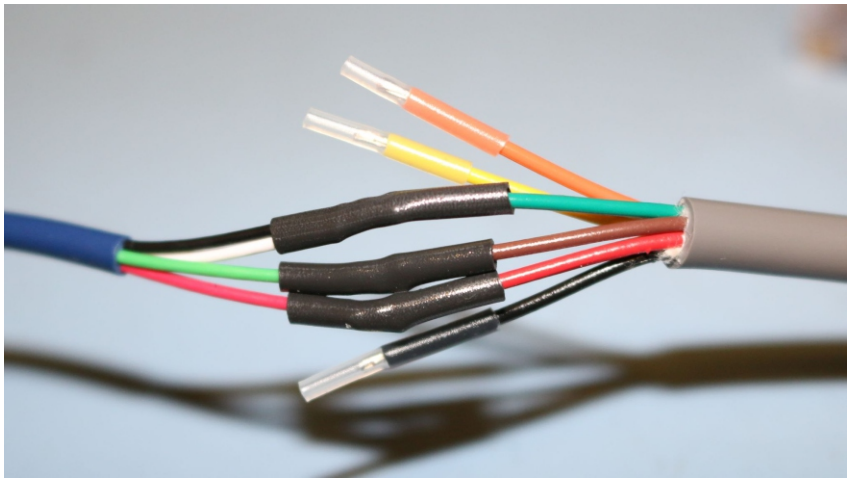



5 - GND
1 - RX
4 - TX
(to Display)
3 - Aux
2 - +12V


2 - +12V
1 - RX
5 - GND
3 - Aux
4 - TX
(to Display)


5 - GND
6 - N/C
3 - Aux
4 - TX
(to Display)
2 - +12V
1 - RX
REV





The default RS232 parameters are 9600B 8N1 and the output string format looks like this:

ASCI	Hex		ASCI	Hex
000:	30 30 30 3A 0D		0000	30 30 30 30 0D
000:	30 30 30 3A 0D		0000	30 30 30 30 0D
000:	30 30 30 3A 0D		0000	30 30 30 30 0D
000:	30 30 30 3A 0D		0000	30 30 30 30 0D
000:	30 30 30 3A 0D		0000	30 30 30 30 0D
000:	30 30 30 3A 0D		0000	30 30 30 30 0D
000:	30 30 30 3A 0D		0000	30 30 30 30 0D
043:	30 34 33 3A 0D		0435	30 34 33 35 0D
000:	30 30 30 3A 0D	OR	0000	30 30 30 30 0D
000:	30 30 30 3A 0D		0000	30 30 30 30 0D
000:	30 30 30 3A 0D		0000	30 30 30 30 0D
000:	30 30 30 3A 0D		0000	30 30 30 30 0D
043:	30 34 33 3A 0D		0435	30 34 33 35 0D
000:	30 30 30 3A 0D		0000	30 30 30 30 0D
000:	30 30 30 3A 0D		0000	30 30 30 30 0D
000:	30 30 30 3A 0D		0000	30 30 30 30 0D
000:	30 30 30 3A 0D		0000	30 30 30 30 0D
000:	30 30 30 3A 0D		0000	30 30 30 30 0D

In other words, 3 digits of speed value followed by a colon and a carrage return (0x0D). Readings are continuously updated at about once a second, and are all zero (000:) when no speed is detected.

NOTE: A second radar sensor had a different output format! It produced a string with 4 digits of speed value and no colon. The last digit was a decimal fraction of the speed in MPH, so 43.5 MPH would look like 0435<0x0D>. We should drop this fraction digit when shown on our DS7025 display, so both sensors produce similar speed values.

NOTE: The Stalker Display that was sent with the radar sensors would blank the display when the sensor sent all zeros, to save battery life we should do likewise.