

FADEC RS232 protocol.

Hardware:

The pin out of the RJ45 connector is:

- 1- Ground
- 2- +5VDC
- 5- TX
- 7- RX

Levels are TTL. Locate the pin 1 with a ohmmeter, it is connected to the brown pin of the servo lead. To connect to a PC it is necessary a RS232 level converter, like the MAX232

Protocol:

RS232 interface, 2400 Baud, 8 bit, no parity.

The data is organized in frames of 50 bytes, The description of each byte is (values are in decimal):

1. First byte of frame alignment, always 252
2. Second byte of frame alignment, always 253
- 3 to 34: HDT text in ASCII
- 35 to 39: not yet used.
- 40: RPM (8bit) 0-255, resolution of 1000RPM, 1 measure each 0,1s
41. Servo pulse width (Low Byte)
42. Servo pulse width (High Byte)
43. Pump power (PWM) (0-255), divide by 2,55 to have percentage.
44. Value of the auxiliary analog input (0-255)
45. Relative throttle position (0-255), divide by 2,55 to have percentage.
46. Voltage of pump. Multiply by 0.06 or 0.04 (depends of fadece type) to have the right value)
47. Temperature. Multiply by 4.
48. Pressure. Only in pressure type units.
49. RPM Low Byte. Resolution 100RPM. 1 measure each 0,5s
50. RPM High Byte

The byte assignment can change in future software releases.