"RedPump1f" Installer

- LabVIEW-based pump control software ("RedPump1f")
- Up to four pumps independently controllable
- Flexible feeding profiles (spreadsheet-based)
- Free access to software application, hardware list and VideoSOP!



Watson Marlow 120U

- Peristaltic pump
- Variable speed 0.1 rpm increments
- Analogue speed input; 4-20mA, 0-10V



Watson Marlow 120U "Red" Pump

T4-USB or Ethernet Multifunction DAQ Device with up to 12 Analog inputs or 16 Digital I/O, 2 Analog outputs (10-bit), and Multiple Digital counters/timers. (LabJack)

- 1x T4 device supports up to two pumps
- T4 communicates via ethernet (Unique IP!)
- Ethernet cable + USB cable included
- <u>Click here</u> for instructions on how to setup the T4
- Important Note: It is advised to use a different computer for the T4 configuration. Using the same computer for the T4 configuration and RedPump1f application may result in a malfunction.

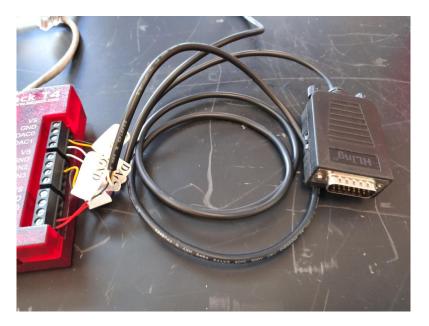


T4 with Ethernet / USB cable

Communication cable (WM Pump <> T4 Device)

- 1x Cable per pump
- Red, Yellow/Black, White leads
- DB15 male to fly wires
- Pinout:

-	Pin2 (white)	T4 DAC
-	Pin3 (black)	T4 Gnd
-	Pin9 (red)	T4 AIN
_	Pin10 (vellow)	T4 Gnd



Communication cable (T4 <> Pump)

Wiring Instructions (T4 <> Communication cable):

- Primary Pump

Yellow/Black - Ground (GND)

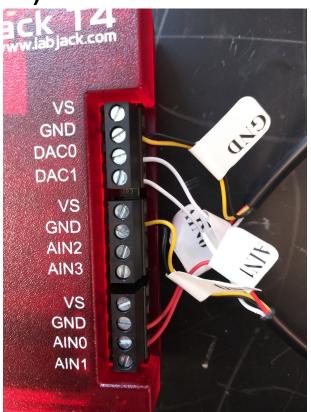
White - DAC 0 Red - AIN 0

- Secondary Pump

Yellow/Black - Ground (GND)

White - DAC 1 Red - AIN 1

 Same scheme for third and fourth pump on second T4 device



T4 wiring for two WM pumps

Ethernet-to-USB adapter (Optional)

- Additional Ethernet adapter for easy T4 setup
- Required if no Ethernet port is available on computer



Ethernet-to-USB adapter