

# How to install a Wyatt Technology DAWN or miniDAWN with an Agilent HPLC system

## Part I: UV (a.k.a. DAD / PDA) detectors:

Locate a HELEOS or TREOS auxiliary cable p/n **P4045-19**, and a BNC/Banana adaptor labeled p/n **P3795-04**. One adaptor is provided in the HELEOS/TREOS ship kit. This adaptor's coaxial fitting connects to the UV back panel "Analog" port. Refer to the table below for wire color assignments. (Note: Optilab T-rEX and/or ViscoStar aux channels also may be used. Please refer to the "Installation and Setup" section in the instrument's user's guide for wire assignments.)

You can use a second BNC adaptor to output a second Agilent signal if desired.

### *Auxiliary Connector Wire Colors:*

	<b>aux1 (+)</b>	<b>aux1 (-)</b>	<b>aux2 (+)</b>	<b>aux 2 (-)</b>
<b>HELEOS or TREOS</b>	<b>White</b>	<b>Black</b>	<b>Red</b>	<b>Green</b>



*Fig. 1: BNC/Banana adaptor Wyatt p/n P3795-04. Also available from vendors of electronics.*

Refer to the Agilent manual to verify which wires connect to which terminals. Most instruments will use the following configuration:

- Hand tighten (crimp) the BNC/Banana adapter's **red** terminal onto the (+) wire.
- Hand tighten (crimp) the BNC/Banana adapter's **black** terminal onto the (-) wire.

Tape off any other wires with electrical tape – they are ground wires, and are not necessary for this connection. The other end of the AUX cable will have an RJ-12 connector. Connect that end into an "Aux In 1&2" port on the back panel of the instrument.



*Fig. 2: Wyatt RJ-12 cable p/n P4045-19*



*Fig. 3: HELEOS/TREOS back panel*

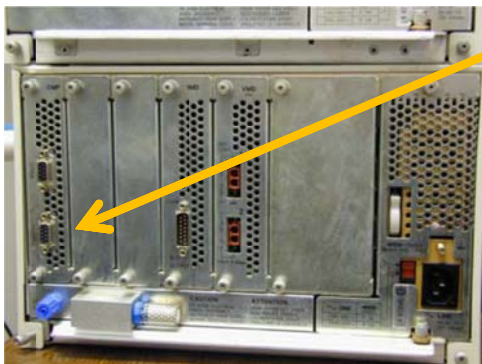
**Note:** The process is the same for connecting an Agilent/HP RI or Fluorescence detector to a HELEOS or TREOS. You will, however, need a second BNC adaptor.

### **Part III: Autosampler:**

Locate the “Remote” port contact closure signal terminal on the autosampler, and use p/n **164072** to make the connection between the autosampler and the HELEOS or TREOS's back panel “Auto Inject In” port. One Agilent autoinject cable is currently included with each new instrument shipment.



**Fig. 4:** Wyatt RJ-12/Autoinject cable p/n 164072



**Fig. 5:** Back Panel of Agilent Autosampler



**Fig. 6:** Remote Port

**Note:** The autosampler is probably already configured to send an adequate electrical pulse (contact closure) to the HELEOS or TREOS upon injection; this pulse can be used to initiate ASTRA data collection if ASTRA is properly configured. There is no formal communication between the HPLC and ASTRA beyond this simple pulse, nor does ASTRA control the autosampler in any way.

### **Part IV: ChemStation Configuration:**

#### **Section 1: UV/DAD Settings**

To access DAD settings in ChemStation, click INSTRUMENT / DAD:



**Fig. 7:** Main View in ChemStation Software

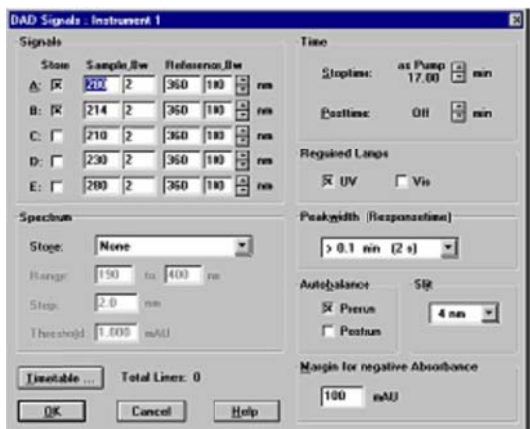


Fig. 8: ChemStation DAD Signals Window

Additional settings are located under INSTRUMENT, MORE DAD:

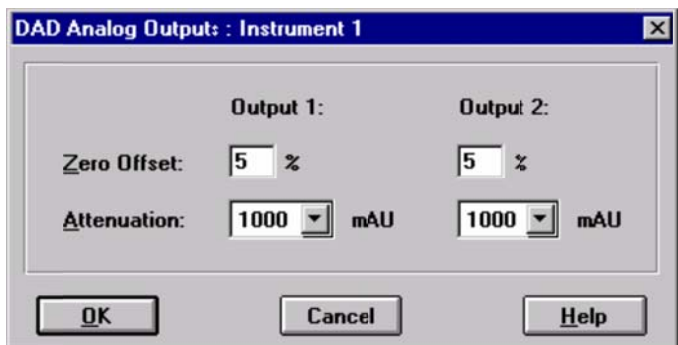


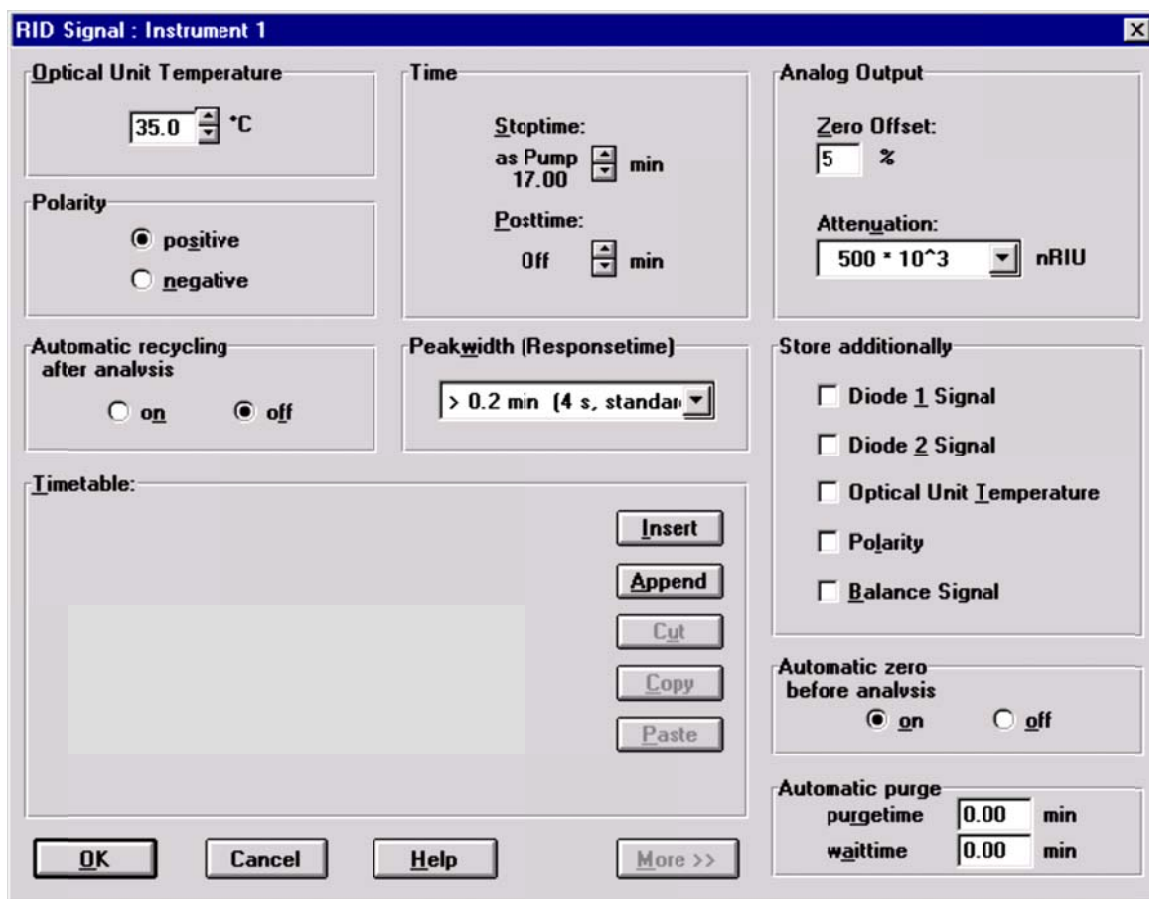
Fig. 9: ChemStation DAD Analog Outputs Window

## Section 2: RI Detector Settings

To access RI detector settings in ChemStation, click INSTRUMENT / RI DETECTOR:



Fig. 10: ChemStation RID Control Window



*Fig. 11:  
ChemStation RID  
Signal Window*

## Appendix:

### Connections to Wyatt DAWN EOS or miniDAWN TriStar:

Refer to the general instructions above.

- To create your own cable connection to an older model Wyatt EOS or TriStar instrument, please use the guide below and a turck cable **P4045-05** to create the connections mentioned above:

	aux1 (+)	aux1 (-)	aux2 (+)	aux 2 (-)
EOS or TriStar	Brown	Blue	Brown	Blue

- The Wyatt part number is **214020** for the Turck/9-pin Autoinject cable. You'll need to order this part as it is not included without request.

Tape off any other wires with electrical tape – they are ground wires, and are not necessary for this connection.



***Fig. 12: EOS/TriStar Autoinject/Turck Cable,  
p/n 214020***



***Fig. 13: Wyatt Turck cable  
p/n P4045-05***

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For additional information, please refer to the DAWN or miniDAWN hardware manual or contact Wyatt Technology Support at [support@wyatt.com](mailto:support@wyatt.com)