

DOCUMENT TITLE: **2475, ALTUS A-10 FLR, ACQUITY UHPLC OPTICS ALIGN**

SYSTEM/ASSEMBLY NAME: **2475, ALTUS A-10 FLR, ACQUITY UHPLC FLR**

PART NUMBER AFFECTED **279002707, 279003302, 279003225, 700009344, 800000199,
186002475, 279000400**

TEST EQUIPMENT NAME: **2475 OPTICS BENCH ALIGNMENT SYSTEM**

TEST EQUIPMENT NUMBER: **TE83031**

TEST SOFTWARE:



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DATE: **April 01, 2002**

REVISED BY: **TYLER MODELSKI**

DATE: **January 05, 2016**

EQUIPMENT REQUIRED

Quantity	Part Number	Description
1	TE83031	2475 Optics Alignment Fixture
1	WAT207000	515 Solvent Delivery System

DISPOSABLES REQUIRED

Quantity	Part Number	Description
A/R	n/a	MilliQ H2O

REFERENCE DOCUMENTATION

Document Number	Description
735000547	Optics Bench Assy Performance Spec.

TEST SPECIFICATIONS

Normalization wavelength must be 397 +/-1 nm

Sample Energy must be >20.0

Ram-Ray Ratio must be > 1.00%

Val-Raman Ratio must be <50%

1.0 Setup

- 1.1 Connect test fixture to computer (9 pin connector, labeled **RS-232**)
- 1.2 Connect Power cord from test fixture to 110VAC outlet.
- 1.3 Make sure 515 pump is powered up and overpressure (HPL) is set to 200, and flow rate is set to 1ml/min.

2.0 Procedure

- 2.1 If Tester PC is not powered up, turn on CPU and monitor.
- 2.2 Login as tester. Password tester. Program will launch automatically.
- 2.3 If Program is not running and Windows desktop is visible, double-click on **2475 Optics Alignment**
- 2.4 Follow instructions on screen. In the event of a tester “hang”, the optics bench may be defective. Remove bench and use open fixture to troubleshoot, referring to troubleshooting guides available.
- 2.5 When complete, disconnect cables and remove bench from test fixture.

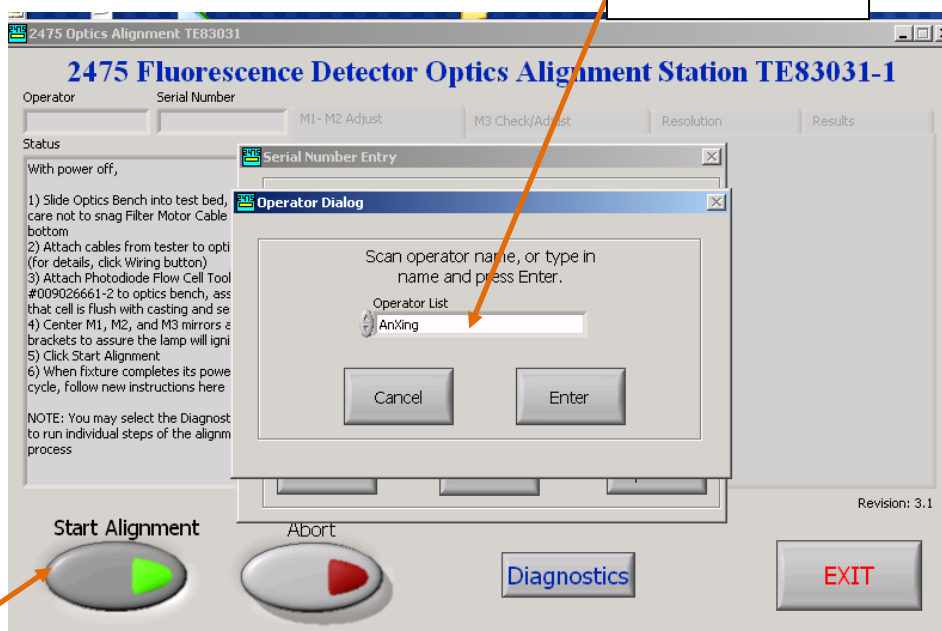
3.0 Diagnostics

- 3.1 Run the test program.
 - 3.1.1 Click “Start Alignment”
 - 3.1.2 Select Operator Name



Run the program

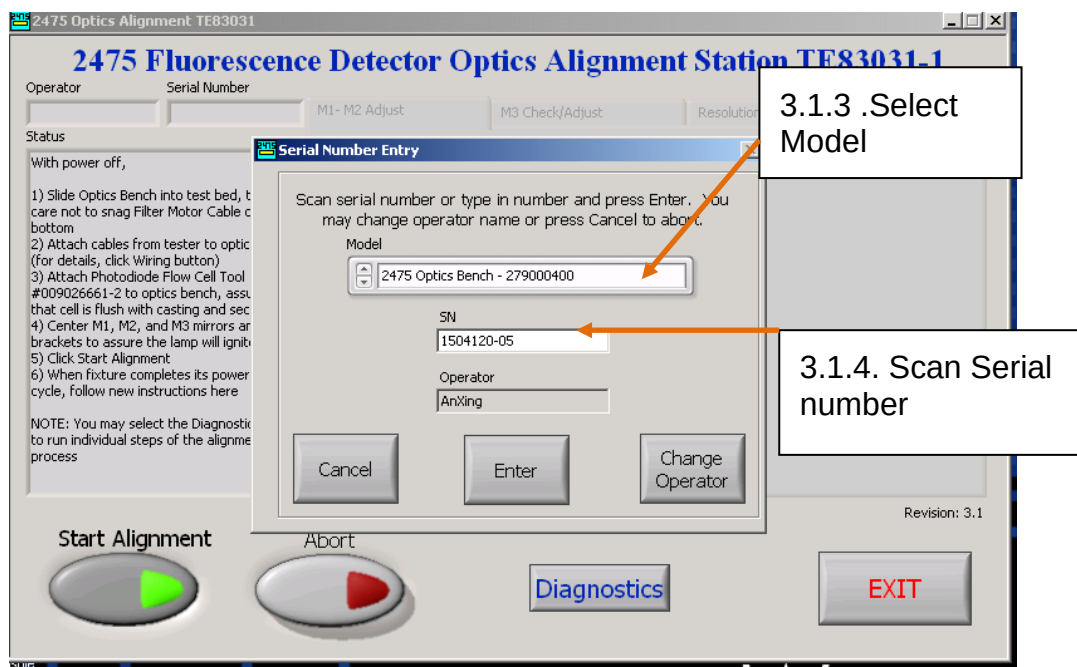
3.1.1.Click “Start Alignment”



3.1.2.Operator Name

3.1.3 Select the model to be tested

3.1.4 Scan in Serial number and press “Enter”



- 3.2 The test system will remove power from the test system. Before turning the “switch” on the screen on, set the slide switches to appropriate settings as follows: **Hyperterminal enable** - put this switch in the enable position to cause the test system to power up and launch hyperterminal. You will now be able to use hyperterminal as normal. **Diagnostics Mode** – put this switch in the enable position if you wish to bypass initialization and calibration. This effectively emulates putting a jumper across J1 inside the 2475 instrument. Set to disable to allow the system to do a full initialization.
- 3.3 Lamp warm up is set to .1 minute and gain is set to 1. If you need to warm up lamp further, simply wait the desired time. To change gain, use hyperterminal and type `setGain x <enter>` where x is the gain amount. You may also type `ETA <enter>` to get enhanced serial output from the 2475.
- 3.4 Commands available:
- Calibrate PMT – `calPMT 4<enter>`
 - Normalize – `NormUnit <enter>`
 - Quick Calibrate – `calgratings<enter>`
 - Check ratios – `repeat align<enter>` (use CTRL-C to stop)
 - Lamp Control – `Lamp ON|Off<enter>`
- 3.5 When you have finished troubleshooting the optics bench via hyperterminal, be sure to close hyperterminal (File|close or click on x in top right corner). This is the only way the test program can continue.

4.0 Data Storage

- 4.1 Optics bench information will be stored in <http://sigmaserver2:8888/sq/>. See TE for access and login information.