ELEMENTAL SCIENTIFIC

oneFAST

Perkin Elmer Quick Guide

Hardware Installation

Please locate the required hardware installation steps as required by your system.   Please note that your host software, which controls the instrument, may have more than one type of connection option.

Perkin Elmer Elan and AS-93+ (via GPIB)

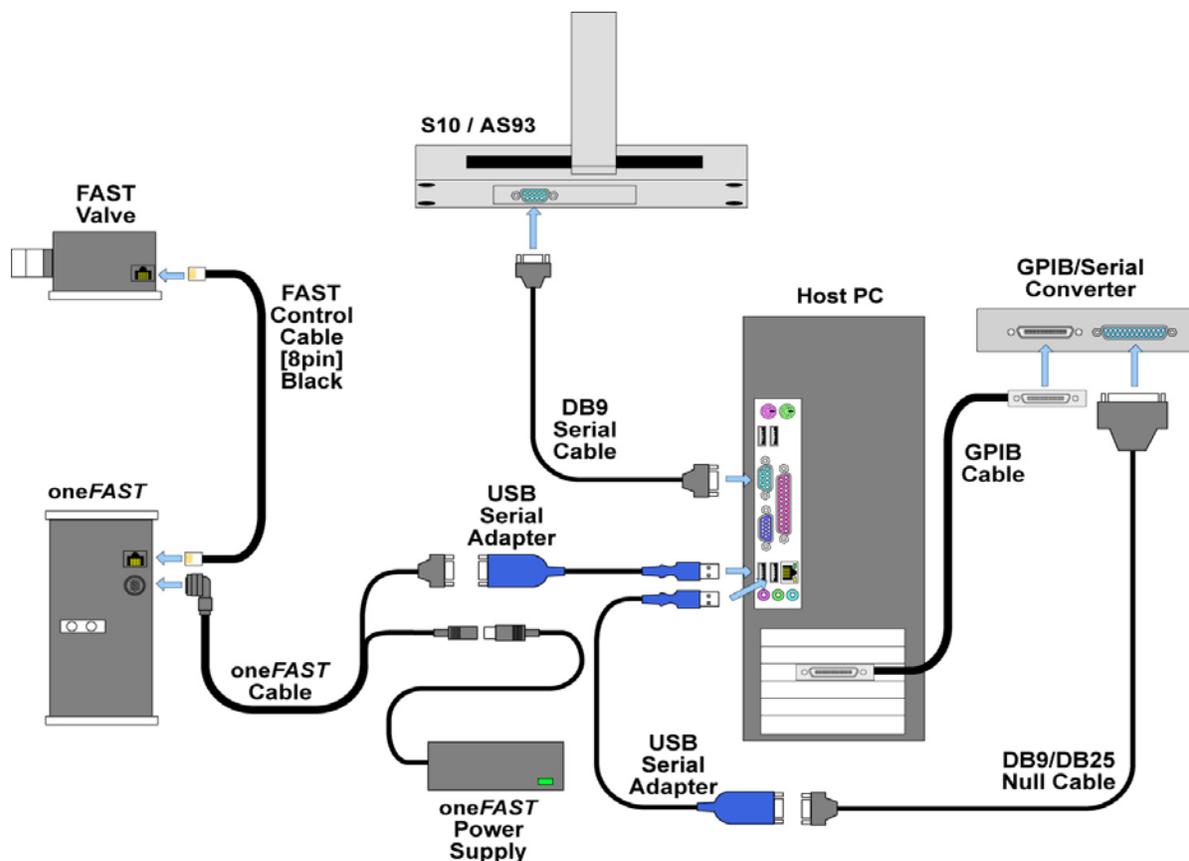The oneFAST system should be connected as shown in the attached Figure 1.

Figure 1: Connections for oneFAST with Elan and S10/AS93.

Hardware installation procedure:

1) Verify that the host computer has proper control of the autosampler before installing any oneFAST components. Please follow instrument and autosampler instructions.

2) Install oneFAST software as described in "Software Installation" section.

3) Disconnect and remove GPIB cable between AS-93+ and GPIB controller.

4) Connect one DB9 Serial Cable (SC-0904) between the AS-93+ and the computer. See Figure 2

 If a DB-9 port is not available on the computer, a USB-Serial Adapter (SC-0905) may be used. It is recommended that the same type of adapters be used throughout the system to minimize driver conflicts.

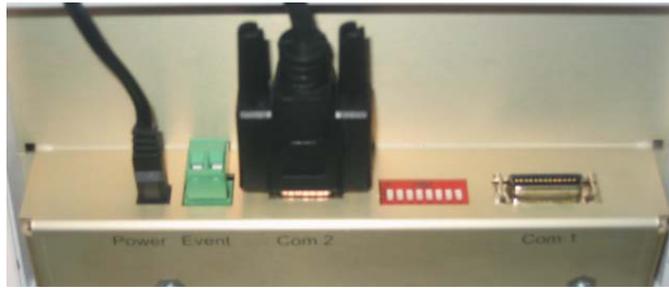5) Change all DIP switch settings to OFF. The switch is shown in Figure 2.

Figure 2: AS-93+ Connections & Switch.

6) Connect GPIB Interface (SC-0901-14) to GPIB bus using IEEE-Cable (SC-0902).

7) Connect GPIB Interface to computer using a USB-Serial Adapter (SC-0905) and DB25/DB9 Null Cable (SC-0903).

8) Place the FAST valve as close as possible to the instrument's nebulizer/spray chamber and use the FAST Control Cable [8-pin] (SC-0599-2005) to connect the valve to the oneFAST controller.

9) Connect the oneFAST controller to the computer using the oneFAST cable (SC-0212-0400) and a USB-Serial Adapter (SC-0905).

10) Connect the oneFAST controller to the power supply (SC-0210) using the oneFAST cable.

11) Power-ON all devices and start the oneFAST software.

12) In the oneFAST software, open the "Ports" menu.

13) Verify that the correct autosampler and instrument were automatically detected. If the autosampler or instrument names require modification, select the appropriate ones from the drop-down box; followed by clicking the red "Click to reconfigure" bar.

14) Select "RS-232 Physical", set the Port to one of the available choices and then click the red "Click to reconfigure" bar.

15) Verify that the three Status Bars are green then click **OK** to close the window and save settings.

16) Configure with appropriate trays by clicking on locations in autosampler image.

17) Start the Elan software and select correct tray file using **Devices**>>**Autosampler**>>**Browse**. Select the shortcut named "oneFAST Elan Tray File" or manually select the file at the following path: "C:\program files\esi\oneFAST\Support Files\Tray Files\oneFAST.try"

If Elan is older than version 3.4 the autosampler selection is located at
Method>>Sampling>>Select…>>Autosampler Type

18) Finally, press the "**Initialize**" button in the Elan software.

After any reconfiguration of the rack layouts in the oneFAST software, this initialization in the Elan software will also be required.

The oneFAST system should be connected as shown in the attached Figure 3.
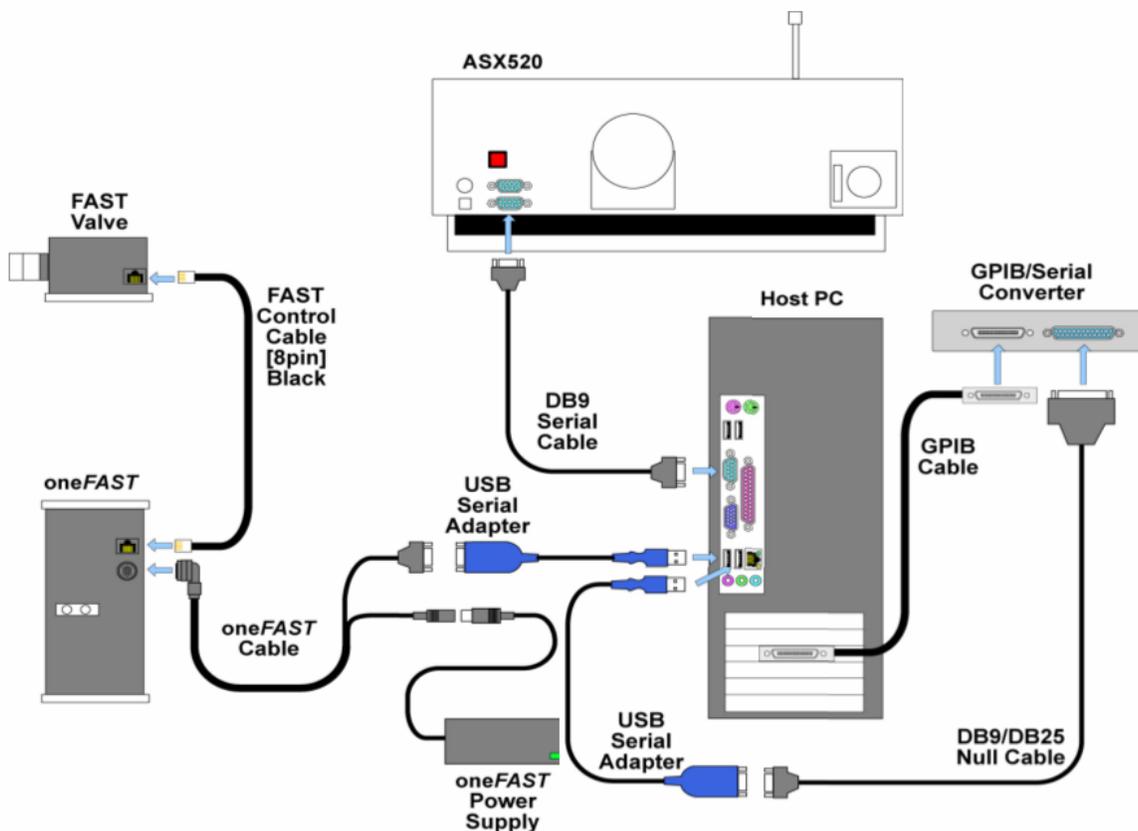

Figure 3: Connections for oneFAST with Elan and ASX-5xx.

Hardware installation procedure:

1) Verify that the host computer has proper control of autosampler before installing any oneFAST components. Please follow instrument and autosampler instructions.

2) Install oneFAST software as described in "Software Installation" section.

3) Locate the serial cable between ASX-5xx and GPIB Interface (NI GPIB-232CV-A). Disconnect the end at the GPIB-232CV-A and reconnect to an available serial port on the computer.

If a DB-9 port is not available on the computer, a USB-Serial Adapter (SC-0905) may be used. It is recommended that the same type of adapters be used throughout the system to minimize driver conflicts.

Please refer to Technical Note (TN010608) if the GPIB interface is an ICS 4894.

4) Connect GPIB Interface to computer using a USB-Serial Adapter (SC-0905) and DB25/DB9 Null Cable (SC-0903).

5) Place the FAST valve as close as possible to the instrument's nebulizer/spray chamber and use the FAST Control Cable [8-pin] (SC-0599-2005), to connect the valve to the oneFAST controller.

6) Connect the oneFAST controller to computer using the oneFAST cable (SC-0212-0400) and a USB-Serial Adapter (SC-0905).

7) Connect the oneFAST controller to power supply (SC-0210) using the oneFAST cable.

8) Power-ON all devices and start the oneFAST software.

9) In the oneFAST software, open the "Ports" menu.

10) Verify that the correct autosampler and instrument were automatically detected. If the autosampler name or instrument name require modification, select the appropriate names from the drop-down box and follow by clicking the red "Click to reconfigure" bar.

11) Select "RS-232 Physical" and set the Port to one of the available choices and click the red "Click to reconfigure" bar.

12) Verify that the three Status Bars are green then click **OK** to close the window and save settings.

13) Configure with appropriate trays by clicking on locations in autosampler image.

14) Start the Elan software and select correct tray file using **Devices**>>**Autosampler**>>**Browse**. Select the shortcut named "oneFAST Elan Tray File" or manually select the file at the following path: "C:\program files\esi\oneFAST\Support Files\Tray Files\oneFAST.try"

If Elan is older than version 3.4 the autosampler selection is located at
Method>>Sampling>>Select…>>Autosampler Type

15) Finally, press the "**Initialize**" button in the Elan software.

After any reconfiguration of the rack layouts in the oneFAST software, this initialization in the Elan software will also be required.

Perkin Elmer Elan and S-10 (via GPIB)

The oneFAST system should be connected as in shown in the attached Figure 4.
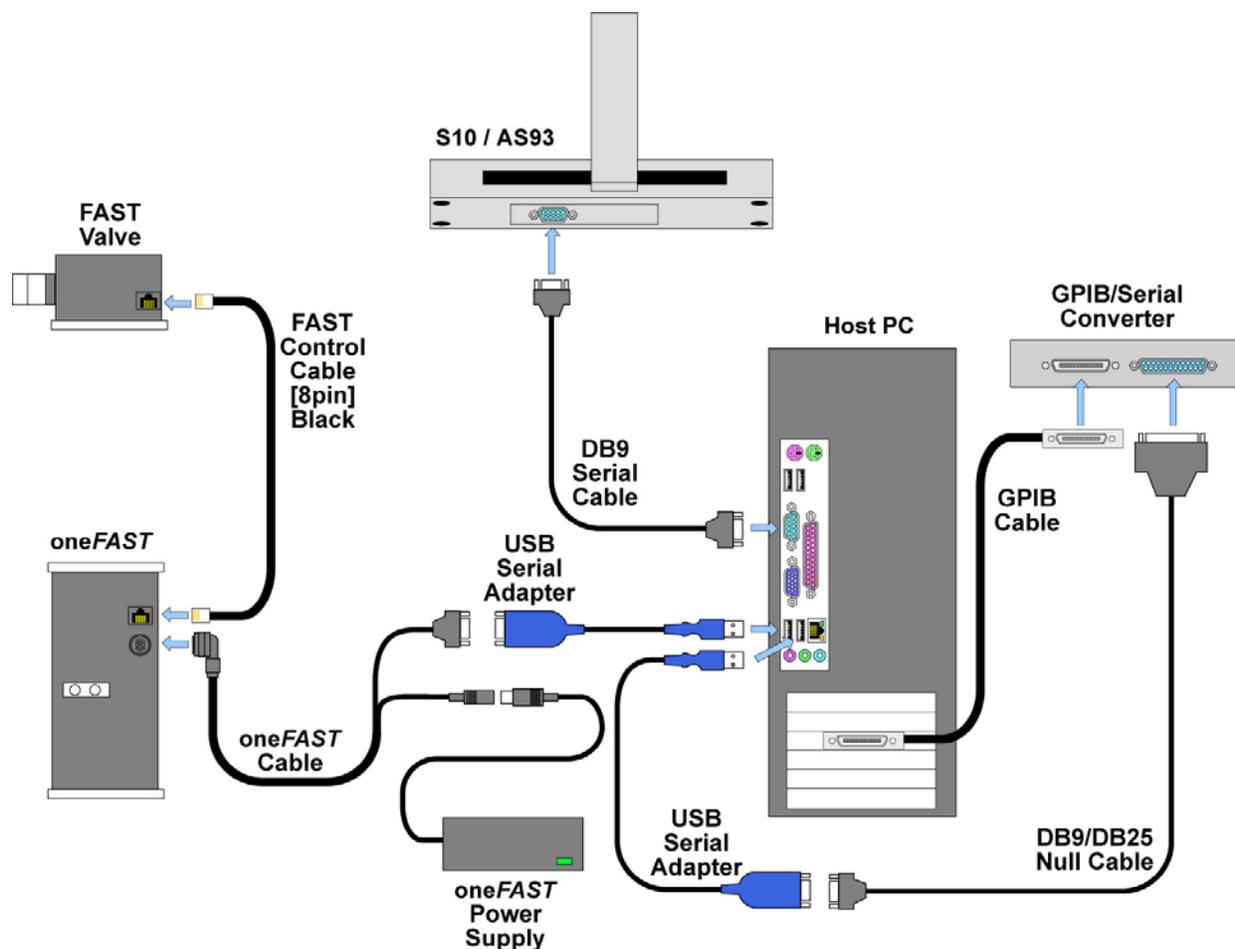

Figure 4: Connections for oneFAST with Elan and S10/AS93.

Hardware installation procedure:

1) Verify that the host computer has proper control of autosampler before installing any oneFAST components. Please follow instrument and autosampler instructions.

2) Install oneFAST software as described in "Software Installation" section.

3) Remove serial cable between S-10 and GPIB Interface (SC-0901-14). Also remove any null adapter that may present.

Please refer to Technical Note (TN290508) if the GPIB interface is a NI GPIB-232-CV-A.

4) Connect GPIB Interface to computer using a USB-Serial Adapter (SC-0905) and DB25/DB9 Null Cable (SC-0903).

5) Connect one DB9 Serial Cable (SC-0904) between the S-10 and the computer.

📌 If a DB-9 port is not available on the computer, a USB-Serial Adapter (SC-0905) may be used. It is recommended that the same type of adapters be used throughout the system to minimize driver conflicts.

6) Place the FAST valve as close as possible to the instrument's nebulizer/spray chamber and use the FAST Control Cable [8-pin] (SC-0599-2005), to connect the valve to the oneFAST controller.

7) Connect the oneFAST controller to computer using the oneFAST cable (SC-0212-0400) and a USB-Serial Adapter (SC-0905).

8) Connect the oneFAST controller to power supply (SC-0210) using the oneFAST cable.

9) Power-ON all devices and start the oneFAST software.

10) In the oneFAST software, open the "Ports" menu.

11) Verify that the correct autosampler and instrument were automatically detected. If the autosampler name or instrument name require modification, select the appropriate names from the drop-down box and follow by clicking the red "Click to reconfigure" bar.

12) Select "RS-232 Physical" and set the Port to one of the available choices and click the red "Click to reconfigure" bar.

13) Verify that the three Status Bars are green then click **OK** to close the window and save settings.

14) Configure with appropriate trays by clicking on locations in autosampler image.

15) Start the Elan software and select correct tray file using **Devices**>>**Autosampler**>>**Browse**. Select the shortcut named "oneFAST Elan Tray File" or manually select the file at the following path: "C:\program files\esi\oneFAST\Support Files\Tray Files\oneFAST.try"

📌 If Elan is older than version 3.4 the autosampler selection is located at **Method>>Sampling>>Select…>>Autosampler Type**

16) Finally, press the "**Initialize**" button in the Elan software.

📌 After any reconfiguration of the rack layouts in the oneFAST software, this initialization in the Elan software will also be required.

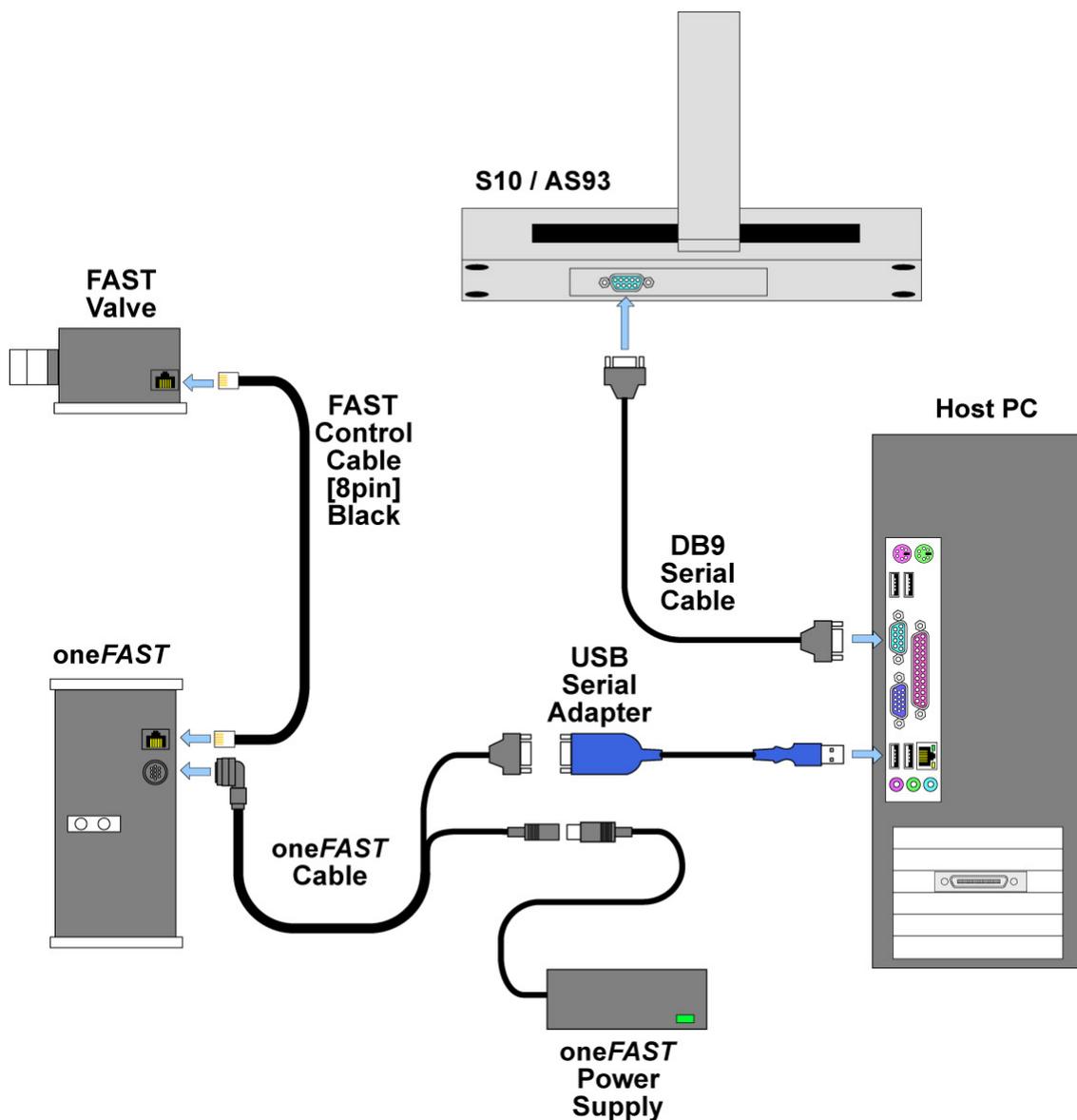The oneFAST system should be connected as shown in the attached Figure 5.

Figure 5: Connections for oneFAST with Optima and S10/AS93.

Hardware installation procedure:

1) Verify that the host computer has proper control of autosampler before installing any oneFAST components. Please follow instrument and autosampler instructions.

2) Install oneFAST software as described in "Software Installation" section. A reboot will be required.

3) Disconnect and remove GPIB cable between AS-93+ and GPIB bus/controller.

4) Connect one DB9 Serial Cable (SC-0904) between the AS-93+ and the computer. See Figure 6.

If a DB-9 port is not available on the computer, a USB-Serial Adapter (SC-0905) may be used. It is recommended that the same type of adapters be used throughout the system to minimize driver conflicts.

5) Change all DIP switch settings to OFF. The switch is shown in Figure 6.

Figure 6: AS-93+ Connections & Switch.

6) Place the FAST valve as close as possible to the instrument's nebulizer/spray chamber and use the FAST Control Cable [8-pin] (SC-0599-2005), to connect the valve to the oneFAST controller.

7) Connect the oneFAST controller to computer using the oneFAST cable (SC-0212-0400) and a USB-Serial Adapter (SC-0905).

8) Connect the oneFAST controller to power supply (SC-0210) using the oneFAST cable.

9) Power-ON all devices and start the oneFAST software.

10) In the oneFAST software, open the "Ports" menu.

11) Verify that the correct autosampler and instrument were automatically detected. If the autosampler name or instrument name require modification, select the appropriate names from the drop-down box and follow by clicking the red "Click to reconfigure" bar.

12) Select "RS-232 Virtual", set the "Virtual Port" as **6** and click the red "Click to reconfigure" bar.

If port 6 is not available choose the next lowest port number.

13) Verify that the three Status Bars are green then click **OK** to close the window and save settings.

14) Configure with appropriate trays by clicking on locations in autosampler image.

15) Run "Reconfigure" from the "Perkin Elmer WinLab32" Program Group.

16) Proceed to "Select autosampler model" and choose "AS-93 plus" and click Next>.

17) Select the interface as Serial (RS-232) and click Next>.

18) Select the same COM port number as the "Virtual Port"; then continue through to "WinLab32 Configuration Complete."

19) Start WinLab32 and select correct tray file using **Options**>>**Autosampler**>>**Browse**. Select the shortcut named "oneFAST AS93 Tray" or manually select the file at the following path: "C:\program files\esi\oneFAST\Support Files\Tray Files\oneFAST.AS93Tray"

The oneFAST system should be connected as shown in the attached Figure 7.
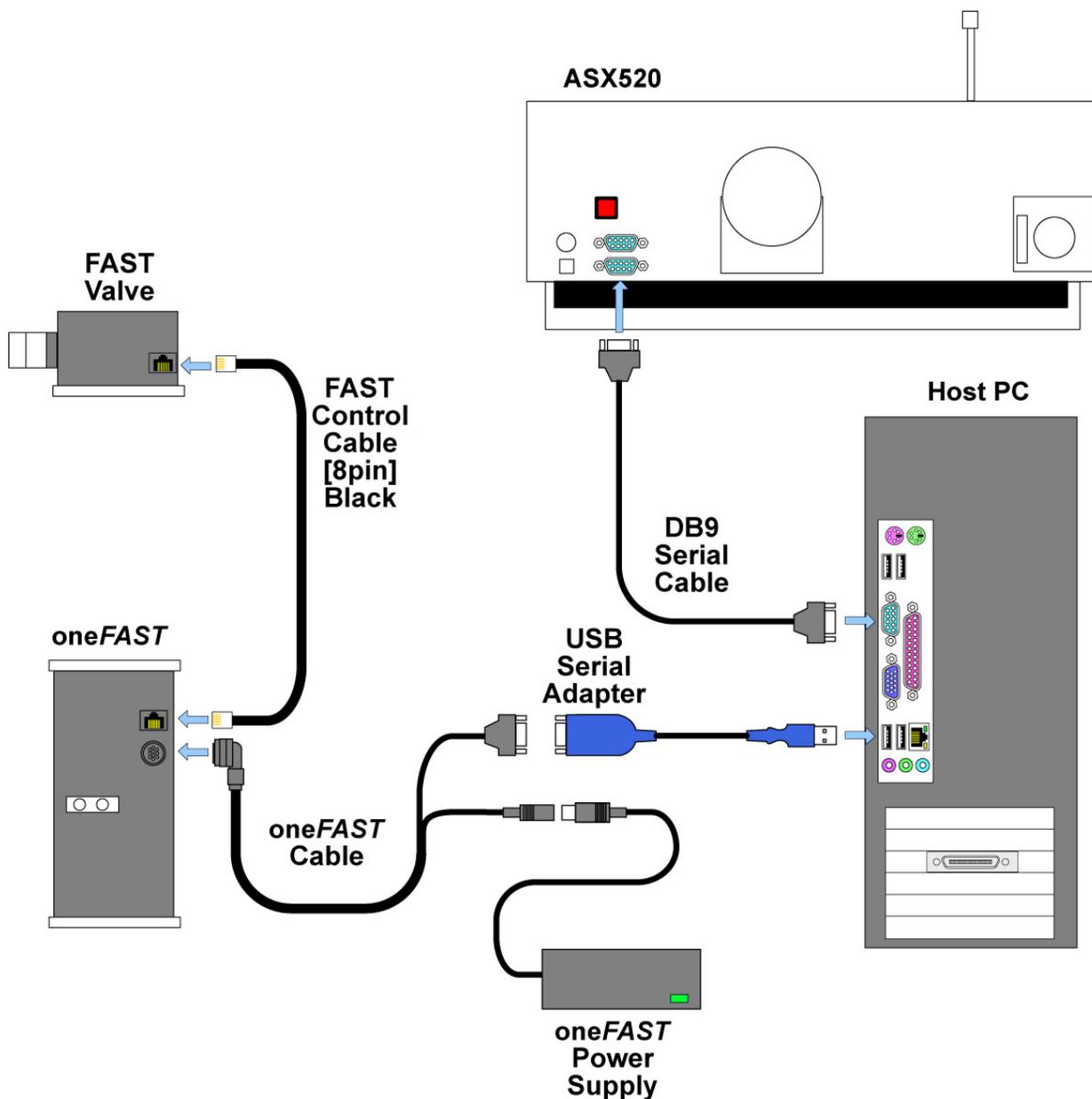

Figure 7: Connections for oneFAST with Optima and ASX-5xx.

Hardware installation procedure:

1) Verify that the host computer has proper control of autosampler before installing any oneFAST components. Please follow instrument and autosampler instructions.

2) Install oneFAST software as described in "Software Installation" section. A reboot will be required.

3) Place the FAST valve as close as possible to the instrument's nebulizer/spray chamber and use the FAST Control Cable [8-pin] (SC-0599-2005), to connect the valve to the oneFAST controller.

4) Connect the oneFAST controller to computer using the oneFAST cable (SC-0212-0400) and a USB-Serial Adapter (SC-0905).

If a DB-9 port is not available on the computer, a USB-Serial Adapter (SC-0905) may be used. It is recommended that the same type of adapters be used throughout the system to minimize driver conflicts.

5) Connect the oneFAST controller to power supply (SC-0210) using the oneFAST cable.

6) Power-ON all devices and start the oneFAST software.

7) In the oneFAST software, open the "Ports" menu.

8) Verify that the correct autosampler and instrument were automatically detected. If the autosampler name or instrument name require modification, select the appropriate names from the drop-down box and follow by clicking the red "Click to reconfigure" bar.

9) Select "RS-232 Virtual", set the "Virtual Port" as **6** and click the red "Click to reconfigure" bar.

If port 6 is not available choose the next lowest port number.

10) Verify that the three Status Bars are green then click **OK** to close the window and save settings.

11) Configure with appropriate trays by clicking on locations in autosampler image.

12) Run "Reconfigure" from the "Perkin Elmer WinLab32" Program Group.

13) Proceed to "Select autosampler model" and choose "Cetac" and click Next>.

14) Select the same COM port number as the "Virtual Port"; then continue through to "WinLab32 Configuration Complete."

15) Start WinLab32 and select correct tray file using **Options**>>**Autosampler**>>**Browse**. Select the shortcut named "oneFAST ASX5xx Tray" or manually select the file at the following path: "C:\program files\esi\oneFAST\Support Files\Tray Files\oneFAST.CetacTray"

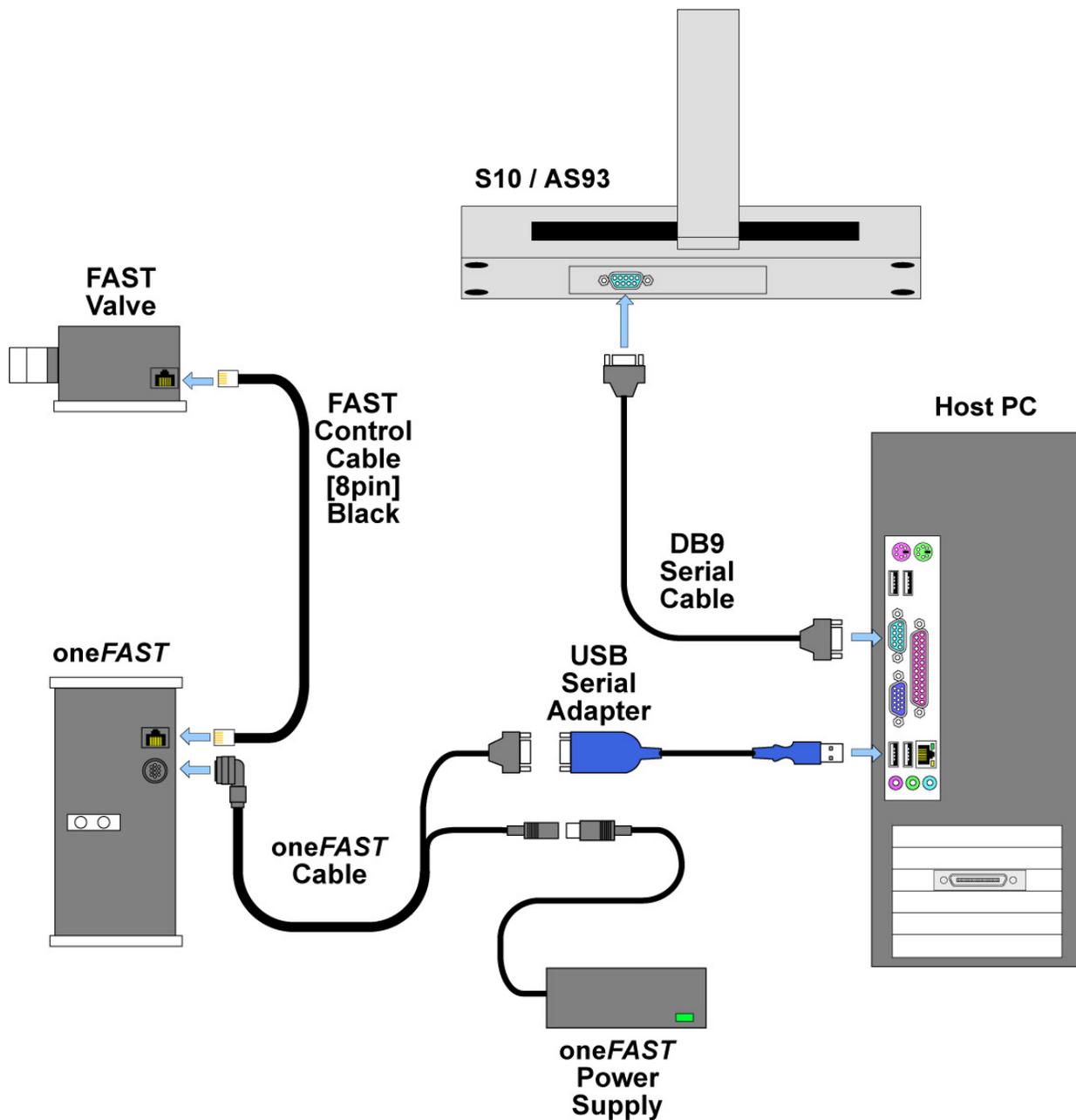The oneFAST system should be connected as shown in the attached Figure 8.

Figure 8: Connections for oneFAST with Optima and S10/AS93.

Hardware installation procedure:

1) Verify that the host computer has proper control of autosampler before installing any oneFAST components. Please follow instrument and autosampler instructions.

2) Install oneFAST software as described in "Software Installation" section. A reboot will be required.

3) Place the FAST valve as close as possible to the instrument's nebulizer/spray chamber and use the FAST Control Cable [8-pin] (SC-0599-2005), to connect the valve to the oneFAST controller.

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4) Connect the oneFAST controller to computer using the oneFAST cable (SC-0212-0400) and a USB-Serial Adapter (SC-0905).

If a DB-9 port is not available on the computer, a USB-Serial Adapter (SC-0905) may be used. It is recommended that the same type of adapters be used throughout the system to minimize driver conflicts.

5) Connect the oneFAST controller to power supply (SC-0210) using the oneFAST cable.

6) Power-ON all devices and start the oneFAST software.

7) In the oneFAST software, open the "Ports" menu.

8) Verify that the correct autosampler and instrument were automatically detected. If the autosampler name or instrument name require modification, select the appropriate names from the drop-down box and follow by clicking the red "Click to reconfigure" bar.

9) Select "RS-232 Virtual", set the "Virtual Port" as **6** and click the red "Click to reconfigure" bar.

If port 6 is not available choose the next lowest port number.

10) Verify that the three Status Bars are green then click **OK** to close the window and save settings.

11) Configure with appropriate trays by clicking on locations in autosampler image.

12) Run "Reconfigure" from the "Perkin Elmer WinLab32" Program Group.

13) Proceed to "Select autosampler model" and choose "S-10" and click Next>.

14) Select the same COM port number as the "Virtual Port"; then continue through to "WinLab32 Configuration Complete."

15) Start WinLab32 and select correct tray file using **Options**>>**Autosampler**>>**Browse**. Select the shortcut named "oneFAST S10 Tray" or manually select the file at the following path: "C:\program files\esi\oneFAST\Support Files\Tray Files\oneFAST.S10Tray"