

## Beamlines Scientific Camera Startup and Shutdown S-AB-P-113 Rev C

This procedure should be followed to startup or shutdown the SI-800 Scientific Cameras on the IRDP, Injection, SPDP or UVDP tables.

**Startup Procedure:**

1	<p>If OFF, turn on the chiller(s) for the desired camera(s):</p> <ul style="list-style-type: none"> <li>• NOTE: There is a single chiller unit for the Nearfield and Farfield cameras as they are plumbed in series.</li> <li>• Toggle the On/Off switch on the side of the chiller. Note: an asterisk (*) will appear on the far left of the display. This means the chiller is not actively controlling the water temperature.</li> <li>• Use the UP/DOWN to adjust the set point temperature to 15.0°C. Press enter when done to lock the set point temperature.</li> <li>• Press the Start button to initiate cooling. The (*) on the chiller display will change to a (-) when cooling or a (+) when warming.</li> <li>• Allow the water temperature to reach 15.0°C +/- 0.1°C before proceeding.</li> </ul> <p>The chiller display should read approx. 15°C. If the unit displays ‘*’, the unit is not cooling. Ensure that the coolant level is adequate. Resolve the problem before continuing.</p>	<input type="checkbox"/>
2	If OFF, turn ON the power supply for the camera being started.	<input type="checkbox"/>
3	Log into and start the system software at the Beamlines workstation per S-AB-P-115.	<input type="checkbox"/>
4	<p>On the PC, click <b>Start</b>, then follow the menus to the remote desktop:</p> <p style="text-align: center;"> <i>‘all programs’</i>  <i>‘accessories’</i>  <i>‘communications’</i>  <i>‘remote desktop connection’</i> </p> <p style="text-align: center;">(continues)</p>	<input type="checkbox"/>

5	<p>Select the computer that runs the cameras of interest and press “Connect”</p> <p>‘<i>sc-diag-blx</i>’ (Camera = Injection NF, IRDP NF &amp; FF) Note: <i>x</i> = 1, 2, 3 or 4 for beamlines 1, 2, 3 or 4.</p> <p>‘<i>sc-diag-uvn</i>’ (Camera = UVDP NF&amp;FF) Note: <i>n</i> = 1-3 for beamline 1 and 3 or 2-4 for beamline 2 and 4 for NF cameras. FF cameras are on beamline <i>n</i> = 2-4.</p> <p>‘<i>sc-diag-z</i>’ (Camera = SPDP NF &amp; FF) Note: <i>z</i> = <b>uc or lc</b> for the upper (uc) or lower (lc) compressor.</p>	<input type="checkbox"/>
6	Double click the camera software icon to be started.	<input type="checkbox"/>
7	<p>In the new window, ensure that the camera back plate temperature is &lt; 30°C.</p> <p>Note: If not, ensure the camera chiller is ‘on’ and not showing any errors. If the chiller is running properly and the temperature is &gt; 30°C, close the software application and resolve the problem.</p> <ul style="list-style-type: none"> <li>• Ensure the camera chip temperature is &gt;0°C when the software starts, if not, close the software and resolve the problem.</li> </ul> <p>Note: After the software starts, the camera chip temperature will drop to approx. minus 30°C.</p>	<input type="checkbox"/>
8	Ensure that the camera software shows ‘connected’ on the <i>ep-ble</i> .	<input type="checkbox"/>
9	Repeat this procedure to start the remaining cameras.	<input type="checkbox"/>
(end)		

**Shutdown Procedure:**

1	Close the software for the desired camera.	<input type="checkbox"/>
2	Logout of the remote desktop.	<input type="checkbox"/>
3	If required, turn the camera and chiller power supplies ‘OFF’.	<input type="checkbox"/>
(end)		