Known problems of WinSPA V1.06 and higher
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As holds for any software, the finding, identifying and removing of bugs can be tedious and sometimes very difficult. For some problems it may not be obvious how to remove them or major code refactoring with only limited benefit may be necessary.
In these cases, it is recommended to follow the workarounds or avoidance hints given below.

Problem description	Avoidance	Workaround
Program crashes if manual energy control is used in parallel to running scans	Use manual energy control only if no other scans are running	
Forms look strange and/or parts of the GUI are not accessible under new Windows GUI schemes, such as Luna or Aero *fixed in V1.08*	-	Use classical Windows style design
Deflection units in Spa4.1 export files are incorrect, if other units than Volts were used. *fixed in V1.08*	Only export scans to the old data formats if the scans were acquired in Volts.	
Program crashes sometimes if scans are running in parallel with the spot tracker. Occurs mainly in simulation mode without hardware access.	Only use the spot tracker when no other scans are running.	Use only atomic scans in parallel to the spot tracker. This greatly reduces the probability of a crash.
Program crashes if all function keys F1 to F12 are hit subsequently	-	Seems only to appear if the program is started from the IDE
Program crashes after a while with "stack overflow" if very long gate times for points scans in SpotTracker are used (e.g., 65ms)		Use reasonable gate times of 1..5 ms in spot tracker

Some other problems are associated with „appearance items" that do not limit the functionality or the reliable operation of the software:
- Doubled right/bottom borders in some double-buffered 1D displays (1D scan, Opti)
- 1D sections in evaluation tools windows (2D, RSM) disappear upon resize of tools window.
  Regarding 2D: fixed in V1.07
  Regarding RSM: fixed in V1.08
- Residuals of graphic tools are visible if the display is refreshed with a tool being active (XOR artifact)

Their removal is under work, however, the user should not be concerned about the above described behavior. The reasons for it are understood or even intended by the way the features are internally implemented.

Finally, some software features are either not yet implemented or not yet sufficiently tested to be available for the user. The respective GUI control elements are therefore grayed out and inactive:
- Units in "opti" scan (only Volts)   *added in V1.07*
- External lens   *added in V1.08*
- Timing of DAQ system   *added in V1.08*
- I(V) scan
- Macro Commander
- Time scan
- Timing of counter   *added in V1.08*
- Scan Correction (finite Ewald sphere radius, lateral distortion)
- Advanced 1D scans
- Angle tool in RSM scan   *added in V1.08*

WinSPA is under continuous development and these features will be implemented in one of the next releases.