

What's New in Homer SW V5030-60

This document lists a selection of important new features of the latest Homer software. References to related Homer Help or Homer Handbook topics have the form of [Main Topic → Sub-Topic → Sub-Sub Topic].

1. HomSoft Windows Applications V5.0.3.0

(Some of the listed features are already available in V5.0.1.0.)

- Introduction of the new web-based Help, which is included with the installation and is also available online on our company [website](#). All topic references in this document include links to the online Help.
- The Main Window now serves as the parent container for practically all program windows. These child windows can only be moved within the boundaries of the Main Window.
[Software Operation → Program Windows].
- A completely revamped, more user-friendly approach to setting Homer sampling parameters. This is implemented via a *dialog window*, eliminating the need to repeatedly access the Homer menu for each parameter. The dialog can be opened using the new button  on the Signal toolbar.
[Signal Waveforms → Sampling Setup Window].

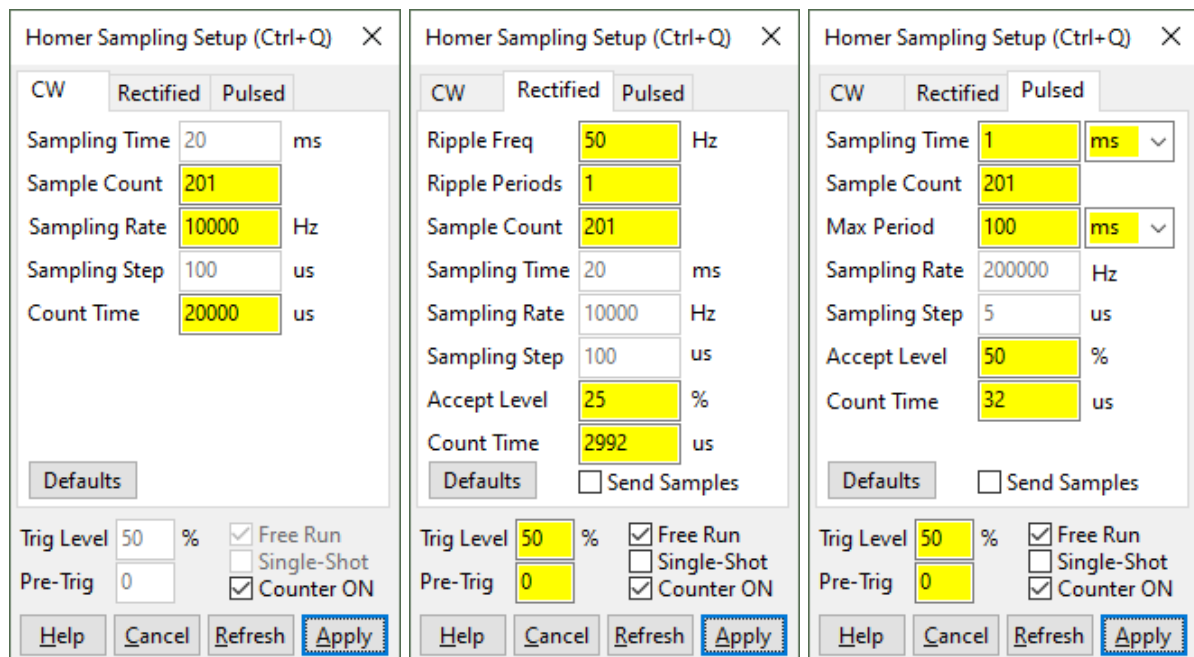


Figure 1. The three tabsheets of the Homer Sampling Setup window.

- Reading from Homer and displaying the peak working power and the *Max tune mag* value in the Homer and Autotune pages of **System Info** window. [Autotuner → System Info Window].

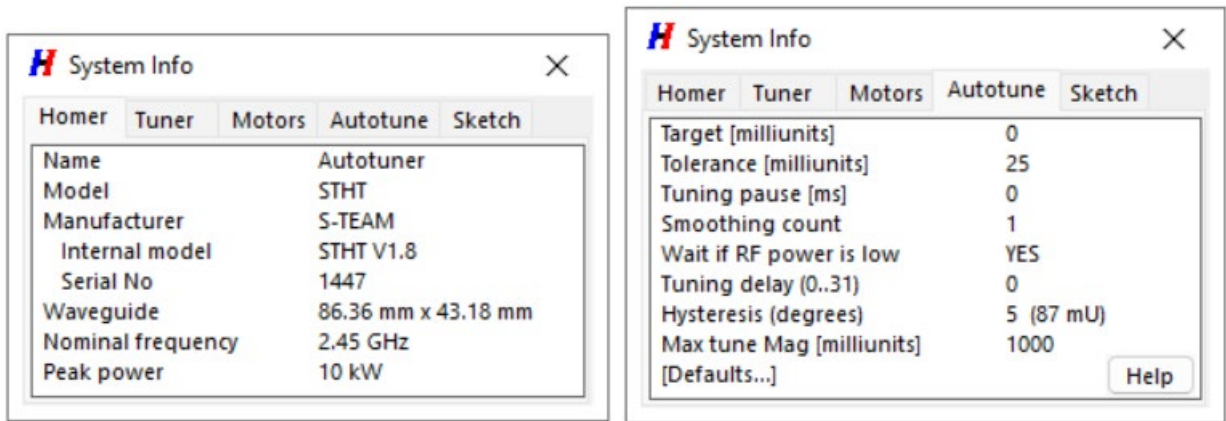


Figure 2.: Homer and Autotune pages of System Info window.

- Additional options for terminating *HomSoft*. Users can now choose whether to write an **ini** file or create a backup **ini** file in the background. For *HomSoft* termination, a menu, a keyboard shortcut, or a toolbar button  can be used. The confirmation dialog displayed when exiting HomSoft normally was also updated. [[Software Operation → HomSoft Ini Files](#)].

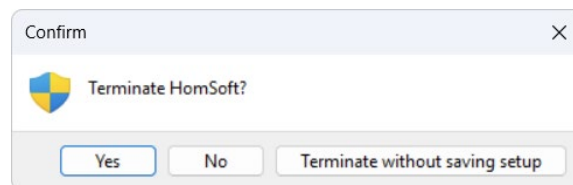


Figure 3. Confirmation dialog when normally terminating HomSoft.

- Ini** files have different names for different variants of *HomSoft* applications. [[Software Operation → HomSoft Ini Files](#)].
- The new **TX Timing** window simplifies the definition of result transmission cadence. [[Software Operation → TX Timing Window](#)].

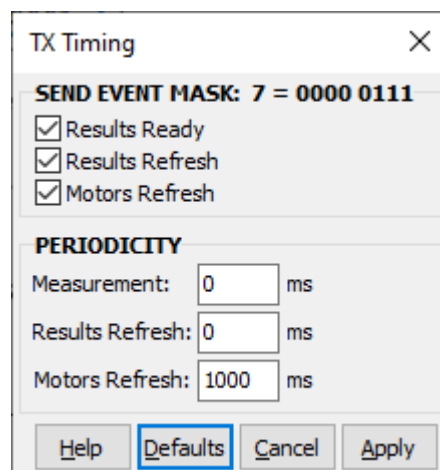


Figure 4. TX Timing window (default settings).

- The software offers the ability to temporarily increase the timeout after a Homer Start/Stop command fails [[Homer Start → Establishing Communication → Case of RS232](#)].

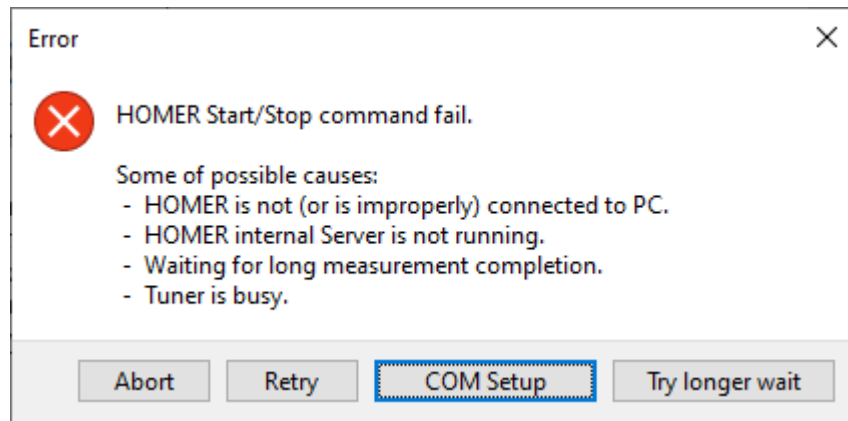


Figure 5. An example error message at program startup due to failed communication.

- Start/Stop command failures have been practically eliminated through improved timeout handling for measurements with very long sampling times.
- Introduction of new **Data Acquisition Setup** window. [[Advanced Topics → Data Acquisition Setup](#)].

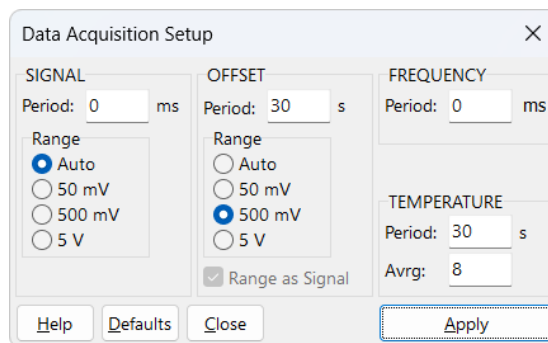


Figure 6. Data Acquisition Setup window.

- Added support for Homer with an integrated EtherNet/IP adapter. Switching to the EtherNet/IP communication method is available via **Tools|Switch Server|EtherNet/IP** menu item.
- Increased tuning speed by omitting writes to flash memory after each autotuning attempt. *Skipped measurements* parameter is replaced by the more exact *Tuning pause* to introduce a delay between consecutive autotuning attempts. [[Autotuner → System Info Window → Autotune Page](#)].

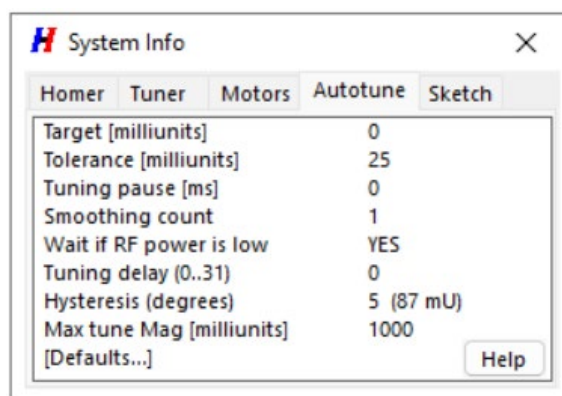


Figure 7. Autotune page of System Info window.

- Added the new *Add Line Length* input field on the DUT page of the **Homer Model** window in the HoSim program to simulate the effect of adding an intermediary waveguide between Homer and the DUT. [[Installation → Mechanical Installation → How Long Is Too Long](#)].

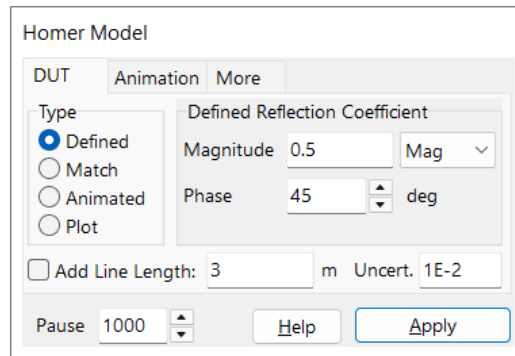


Figure 8. Homer Model window: DUT page.

- Updated display windows: removed the *Caption*, *Labels*, and *Date/Time Stamp* features. Added the new Trace Properties button  to the display window toolbar.

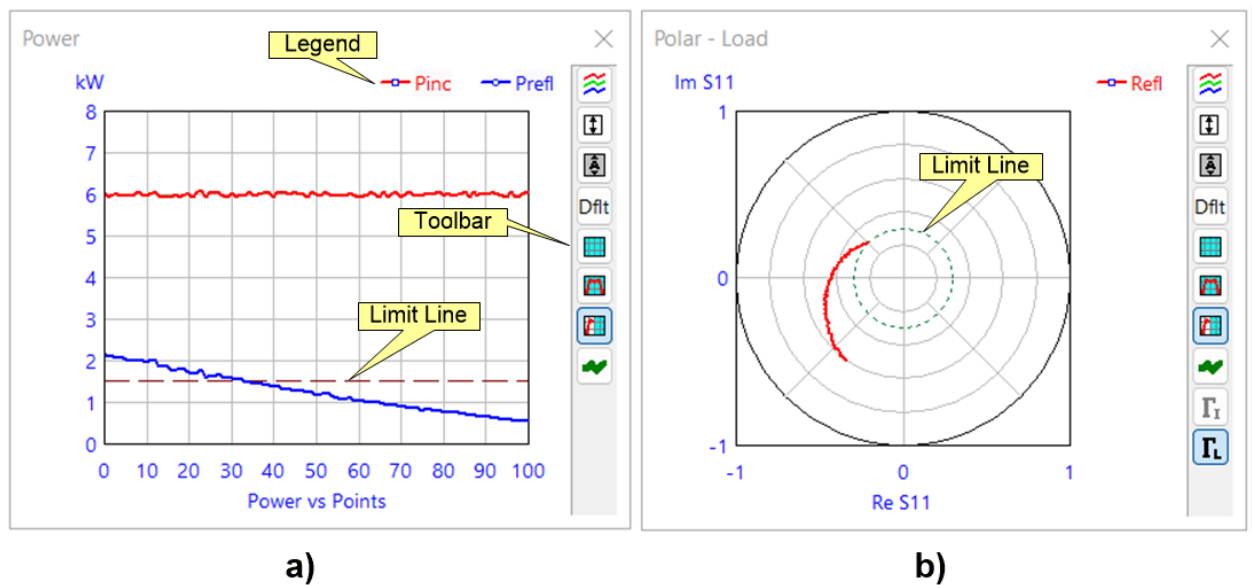


Figure 9. Display windows with (a) rectangular plot and (b) circular plot.

- Added an automatic waveform determination procedure to simplify waveform sampling required for determining the generator signal waveform and/or slow periodic variations in the load reflection coefficient. [[Waveform Determining](#) → [Automatic Waveform Determining](#)].
- To enhance visual detail and provide finer control of stub positions via dragging, the **Tuner View** window includes two buttons that will open dialogs for scaling the tuner image:
 - X scales the overall width of the window while maintaining its aspect ratio.
 - Y defines the scaling factor for the waveguide height relative to the motor height, effectively stretching the window vertically.

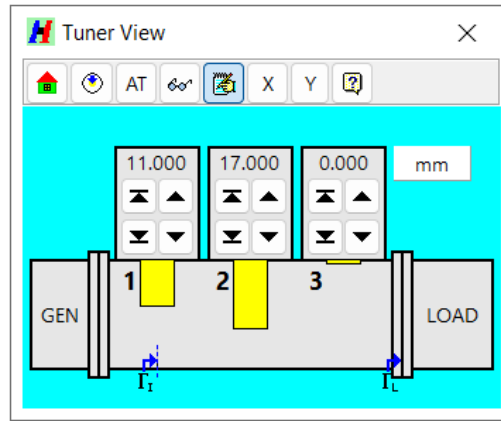


Figure 10. Tuner View window.

- When Rectified or Pulsed sampling mode is selected and individual samples are displayed, the x-axis title in the display window includes the full-scale time span.

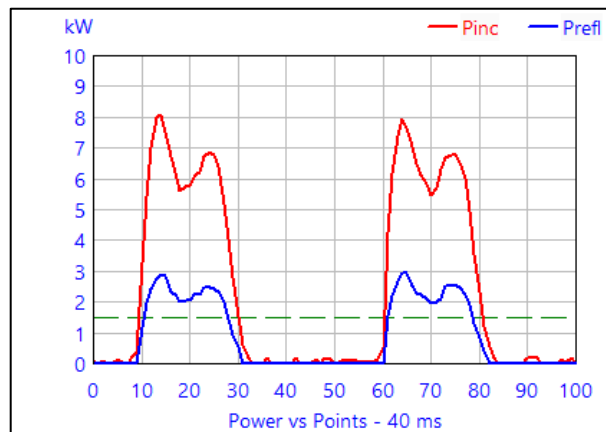


Figure 11. Waveform chart showing the full-scale time span in the x-axis title.

- COM port settings for the Tu_rs.exe and TuTool_rs.exe programs are now stored separately in their respective Ini files in the User Folder. This allows both programs to run simultaneously and operate different Homer units.
- Added the **Commun|Format** menu, which allows switching the format of RS232-transmitted results between Binary (default) and ASCII (readable text). Note that when HomSoft starts, the result format is automatically set to Binary. [[HomSoft Menu](#) → [Commun Menu](#)].
- HomSoft now runs in DPI-unaware mode, resolving scaling issues on high-resolution displays.

2. Firmware (Server) SrvHo V60

- The Autotune LED now consistently reflects the actual Autotune state, regardless of whether it was changed by the Autotune switch or an external command.
- Automatic handling of non-fatal motor errors. This procedure is governed by three new parameters in **Tun.cfg**: *MotErrAction*, *MaxAttempts*, *GuardSeconds* [[Advanced Topics](#) → [Homer Autotuner Starting Parameters](#)].
- Correction and modification of Autotune setting and querying commands (Section 7.3 of the Homer Communication Protocol).
- New command *Read Maximal Motors Step Count and Step Size* (Section 6.3).

- Modified *Motors Initialization* command for the case of CAN Bus (Sec. 6.2). The old version is still available.
- Command *Selected Stub Home* (Sec. 6.2.2) removed.
- Stub Swap Alarm (SSA) functionality removed.
- Removed commands and constants related to sending Tune Positions, i.e., the commands *Switching Sending Tune Positions ON and OFF*, *CompStubs*, and *MeaComp*.
- Added commands for querying and setting the format of RS232 results (Sec. 12.1).
- Added a parameter to the Change Server command for switching the Server to EtherNet/IP communication mode (Sec. 9.1).
- Replaced the *Skipped measurements* parameter with the *Tuning Pause* parameter (Sec. 7.1).