

COP-WIN/HRV/BP Version 6.20 Update

Overview of New Features

Enhanced PEP measurement and display:

BIT has had several inquiries about the possibility of acquiring and displaying PEP values for each cardiac cycle acquired in the COP-WIN data files. For this reason we have added a real time “cycle by cycle” **Pre Ejection Period** display to the Acquisition Window. This feature was made possible by the addition of a “PEP detector” DSP software module specifically designed for this purpose. The “cycle by cycle” PEP values are also acquired and stored in the Version 6.20 EA data files.

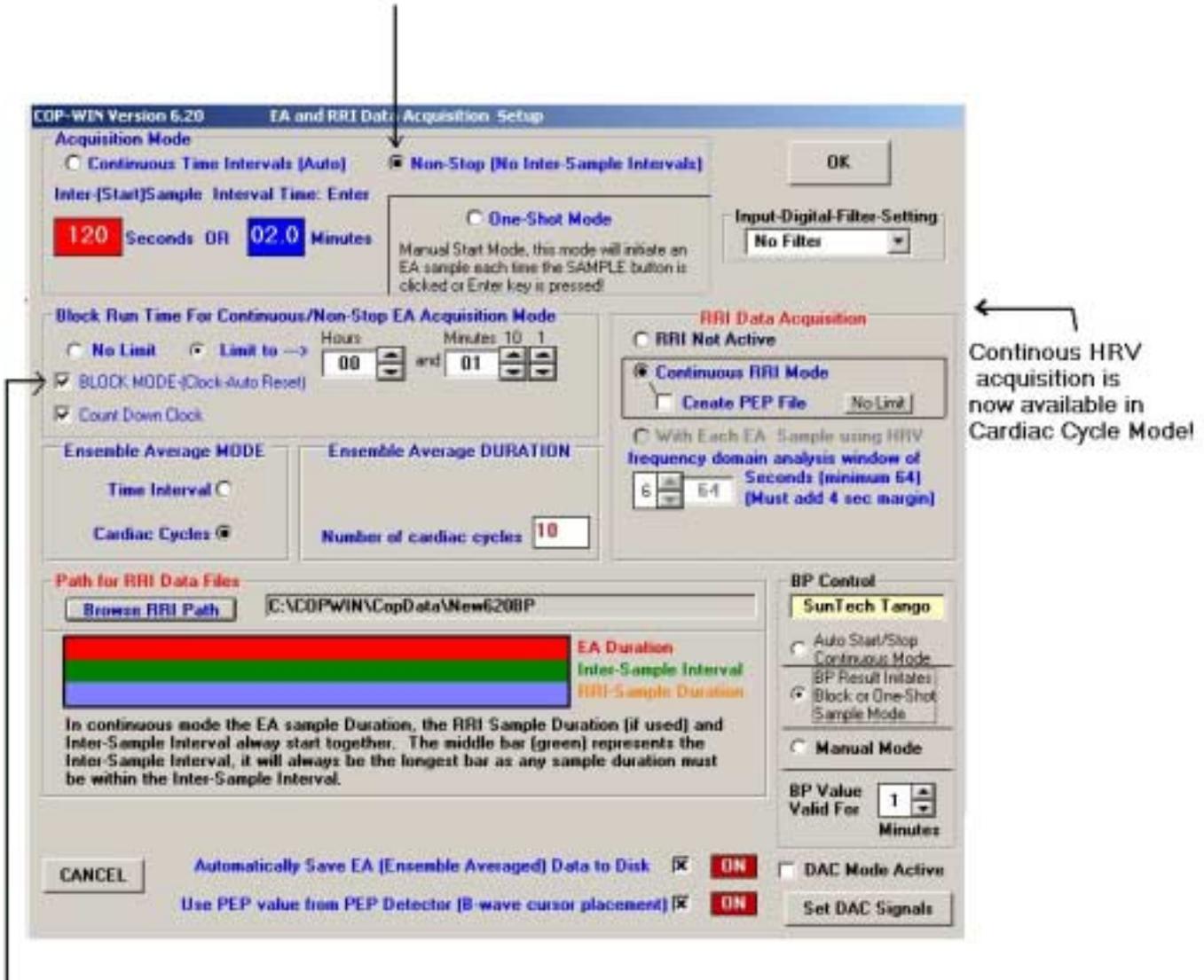
SIMULATION MODE:

This mode can be very beneficial for testing, demonstration and training purposes. In the Simulation Mode the CopWin/HRV program substitutes actual stored impedance signal data in lieu of the data from the data acquisition processor. The signals appear just as they would if an actual subject were connected to the impedance cardiograph, which makes this option great for testing and training purposes. In this mode the simulation data may actually be acquired and stored as if it were real data. The user should always use caution NOT to accidentally mix test data using the simulation mode with actual subject data. All EA sample data files created using the Simulation Mode will have the notation of “SIMULATION DATA!” in the file’s comment field.

BLOCK and Non-Stop Data Acquisition Modes:

COP-WIN/HRV Version 6.20 adds the ability to acquire continuous “Non-Stop” EA (Ensemble Average) sample files over a specified time period. For CopWin the term “Non-Stop” simply means “without an inter-sample interval”. The equivalent of this sample mode was possible in Version 6.10 by setting the EA sample time equal to the inter-sample interval time in Continuous Time Interval Mode. However, the Version 6.20 Acquisition Setup Window now has a “Non-Stop” option selection for this purpose. In addition, the “Non-Stop” and the Continuous Time Interval modes now offer a Block Mode option that permits the user to acquire and label data samples with an ID Code, such as numbered “BLOCKS”. For example, if you have the EA sample time set to 10 seconds and the Non Stop Time Limit set to 1 minute, then each time the Sample Button is clicked (or the system detects an external trigger), six 10 second EA samples will be acquired each with a label of Block #1. When the Sample Button is clicked again another six 10 second EA samples will be acquired each with a label of Block #2. This option is especially useful for users who are using the Cycle Mode rather than the Time Mode to determine the duration of the EA acquisition samples. For example, if the user has the EA length set to 6 cardiac cycles then the number of EA files acquired in 1 minute will depend on the subject’s heart rate. When these data blocks are associated with events, the labeling or “ID Code” will make data analysis and review much easier. In addition, the label or ID Code will default to = “BLOCK”, however this may be changed by the user to other text such as EVENT#, SLIDE#, STIM#, etc (there is a 10 character limit).

New Non-Stop Acquisition Mode- ISI=EA time!



New Block Mode! When Block Mode is selected and the Sample button is clicked (or externally triggered) the COPWIN system will acquire EA files for the specified acquisition time limit and then COPWIN will automatically reset the Acquisition Limit Clock and then repeat the specified acquisition time again when the Sample button is clicked (or externally triggered). The blocks of data will be sequentially numbered and label in each EA file.

DAC Option:

Beginning January 2007, a **DAC** (Digital to Analog Converter) is now being offered as a hardware option to new purchasers of the HIC-3000 system. This option is being offered a few users have expressed an interest in having the ability output the computed indices from CopWin’s data acquisition mode as analog signals so that they may be acquired by other analog data acquisition software programs. CopWin Version 6.20 is required to use this hardware option.