



## Configuring the

AudioSystem

**EWS 88 MT**

The ultimate MultiTracking solution

AudioSystem

**EWS 88D**

Advanced Digital Audio Tool

AudioSystem

**EWX 24/96**

High Resolution Soundcard

for



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Driver version: 5.00.2000 Build 112

ControlPanel version: 1.03.25 Build 112

Sonar version: 1.0

Date: Aug. 6<sup>th</sup> 2001

### ***Integration:***

Sonar is a new audio and MIDI sequencer from the makers of Cakewalk ( Twelve Tone Systems®). Different from sequencers like Steinberg's Cubase or Emagic's Logic, Sonar doesn't use the well known ASIO standard to achieve a low latency. Furthermore, the so-called "WDM Kernel Streaming" has established a new standard that is completely supported by the EWS88 MT/D and the EWX 24/96. Sonar uses the hardware's standard WDM driver support and achieves, thanks to the kernel streaming, a latency comparable to ASIO.

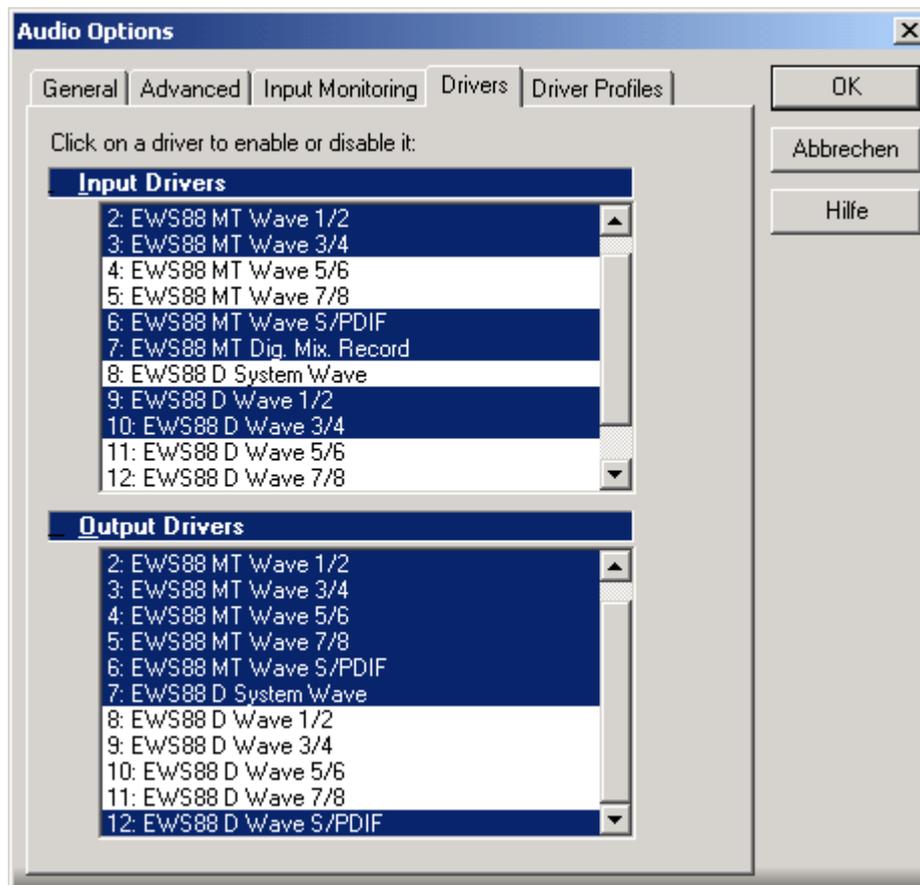
The latency optimization takes place at several positions. Start with the setting "DMA Buffer Transfer Latency" in the Settings menu of the EWS88 (EWX 24/96) ControlPanel (a secure start value is 10 ms for example). When more than one card is installed in a cascaded system the settings must be made for each card individually (always with the same value).



With the first starting of Sonar automatically the "Wave Profiler" will also be started to carry out the audio hardware test. If this does not happen automatically, then you can start it manually in the menu *Options \ Audio Options -> Wave Profiler*.



After the hardware analysis you have to select the input and output devices in the menu *Options \ Audio Options -> Drivers*.



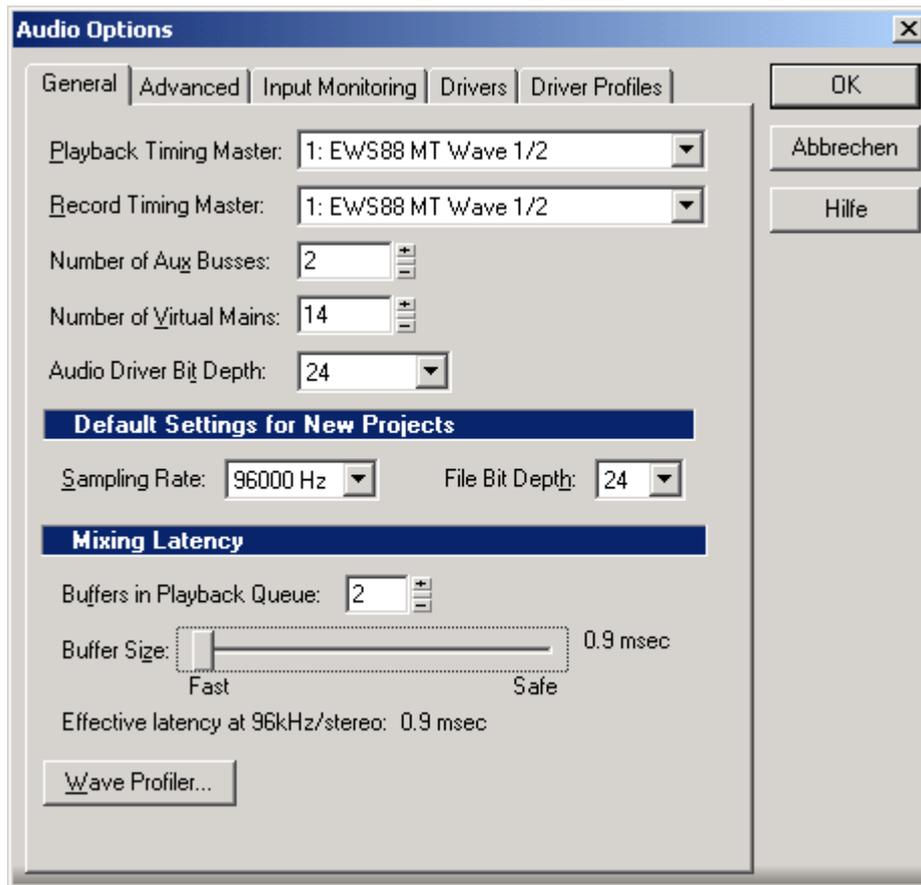
### **Optimizing:**

To optimize the latency we recommend the following configuration steps:

1. Stop the audio engine with the appropriate button in Sonar



2. In the EWS 88 (EWX 24/96) ControlPanel you can set a shorter DMA Buffer Latency time. Pay attention that on cascaded systems with more than one card each card is set configured separately.
3. After reactivating the audio engine in Sonar further optimization can be carried out in the menu *Options \ Audio Options \ General*.



Using the Buffer Size controller you can adjust the latency. Additionally using a smaller value in the field “Buffers in Playback Queue” will further optimize the latency time.

4. If you hear clicking, drop-outs or if the sound completely cuts out when using Sonar then set the changed values from points 2 and 3 back to their original values and/or adjust them in smaller steps to determine the correct settings for your PC.

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**Important:** After making any changes to the parameters described above the Wave Profiler must be started again and the selection of the in and output devices must be controlled in the menu Options \ Audio Options -> Drivers.

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