



## **DAE™ 5.0.1cs7 Read Me**

**December 22, 2000**

### **Fix for Digi 001 with MOTU Digital Timepiece**

#### **The Problem**

When the DTP initially locks to an incoming LTC source, the outgoing word-clock varispeeds momentarily as the originating LTC source ramps up to speed. This has caused an issue with Digi 001 because 001 has a sample rate detection circuit built in to the HW and software. We put this 'feature' in because we did not have any sample-rate indicators on the front of the 001 box. We needed some way in which to inform the user that the sample rate currently chosen in the session does not match the incoming word clock that 001 is slaved too. Imagine recording a 48 kHz digital source into a 44.1 kHz session. As soon as you switch the clock back to 'Internal' all your audio plays back a minor-3rd lower. Unfortunately, this has caused the unwanted behavior of the dreaded 'The incoming sample rate does not match the session sample rate' dialog box when using a DTP. To make matters worse, you have to click through upwards of 30 instances of the same annoying dialog box! This occurs when the incoming sample rate is shifting dynamically. Minute changes in sample rate clock during a record or playback pass (which are common when locking to a tape machine with LTC striped on a track), will not generate this error.

#### **The Solution**

We believe DAE™ 5.0.1cs7 fixes 99% of the problem. First, we have removed the 'Incoming sample rate message...' boxes from appearing which will solve most problems. If the incoming sample rate shifts up or down in small increments, Pro Tools LE will continue playing or recording. However, if the varispeed range is extremely wide during playback/record, you may experience a 'Hardware interrupts held off to long...-9093 error.' In our tests here, the varispeed range had to have a momentary shift of +/- 1.5 semitones while PTLE/Digi001 was playing back or recording in order to generate this -9093 error. However, if the dynamic varispeed shift occurred without Digi 001 in playback or record (say for example you are in record pause or PTLE is waiting on-line for incoming sync), you will not encounter any errors, in most situations.

For those users who are recording on-line, we recommend starting the originating LTC source 5-10 seconds before the insertion point (or trigger sync point) in Pro Tools in order for any dynamic shifts in varispeed to occur before PTLE is playing back or recording.

The solution involves replacing your current DAE (located in the System Folder) with DAE™ 5.0.1cs7, that has parts of the sample-rate detection error messaging turned off. All other functionality is left intact. This DAE has only been tested with Pro Tools LE v5.0.1. So those of you still on Pro Tools 5.0 should update your software to 5.0.1 before installing this DAE.

Thank You,  
Digidesign Technical Support