APOGEE

Using Big Ben with Pro Tools (without a Sync I/O)

On this first page we will deal with connecting Big Ben to a Pro Tools HD rig without using a Sync I/O. The next page deals with connecting with the Sync I/O.
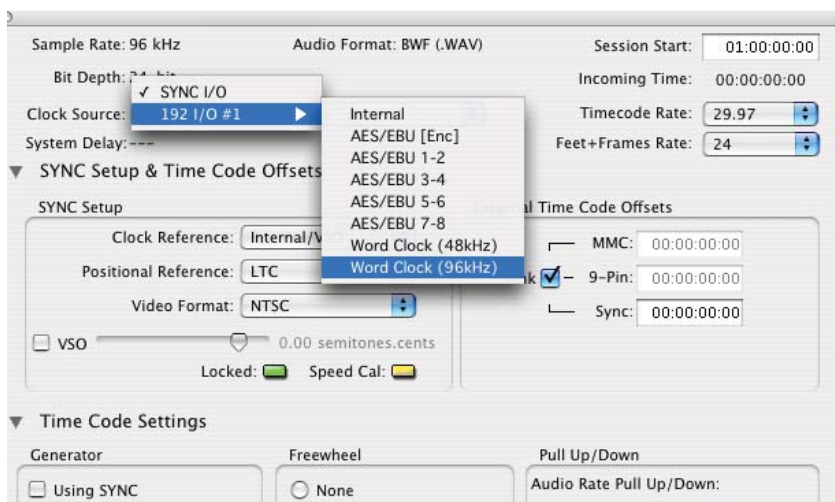
1) Connect a 75 ohm BNC cable between the WC Out connections of Big Ben and the EXT In of each audio interface. (as shown below)

2) Do NOT connect the LOOP Sync connections between the audio interfaces. To best take advantage of Big Ben's superior clock, each interface must be connected directly to a Big Ben word clock output.

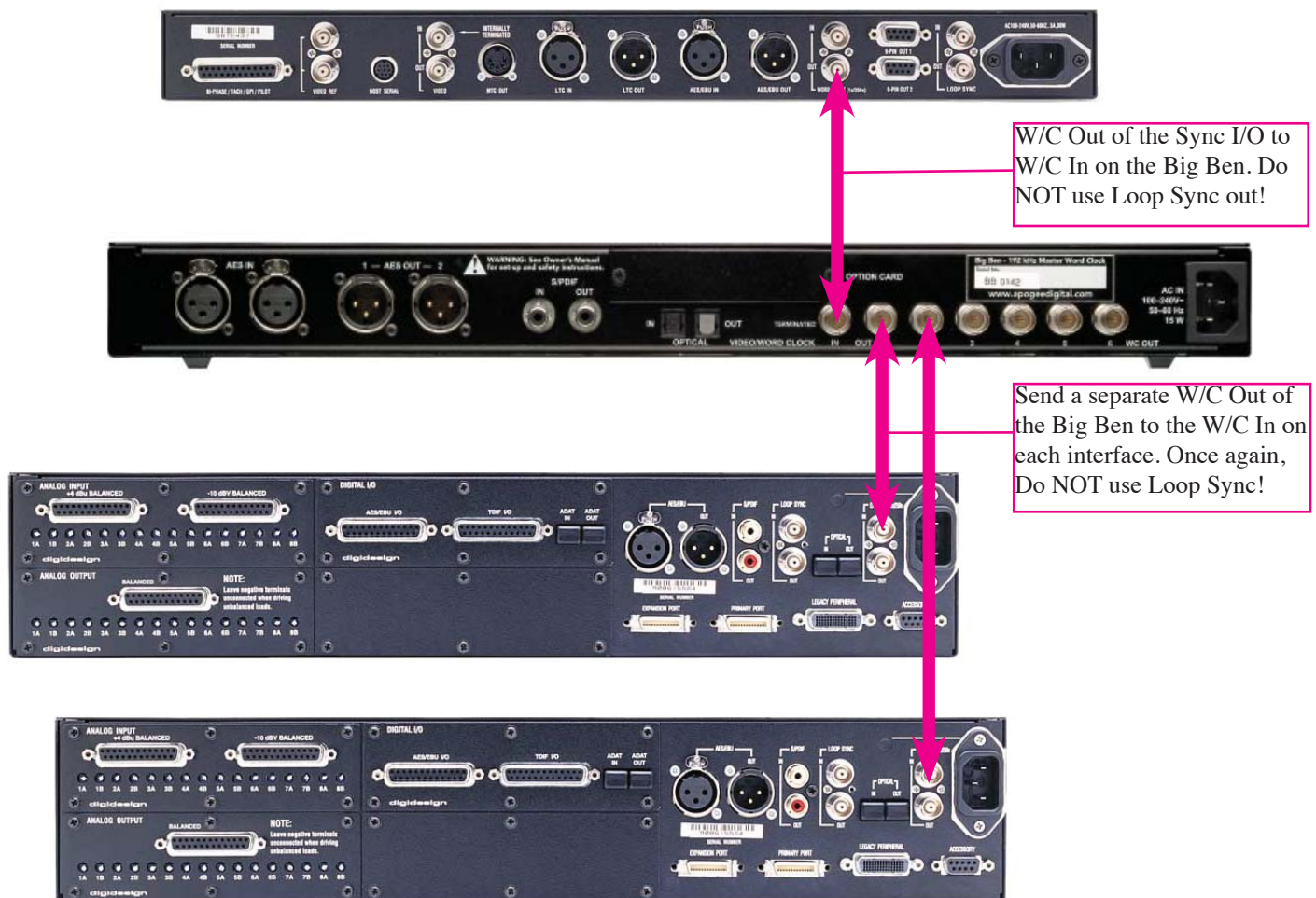Send a separate W/C Out of the Big Ben to the W/C In on each interface. Once again, Do NOT use Loop Sync!

1) Determine the desired sample rate for the entire HD system, and set Big Ben to that Sample rate.

2) In Pro Tools software, Session>Setup> Click on the "Clock Source" field, select the first audio interface, and set its clock source to "Word Clock"

3) Repeat Step 2 for all audio interfaces. Note that selections made for previous interfaces will not be checked; this is normal.

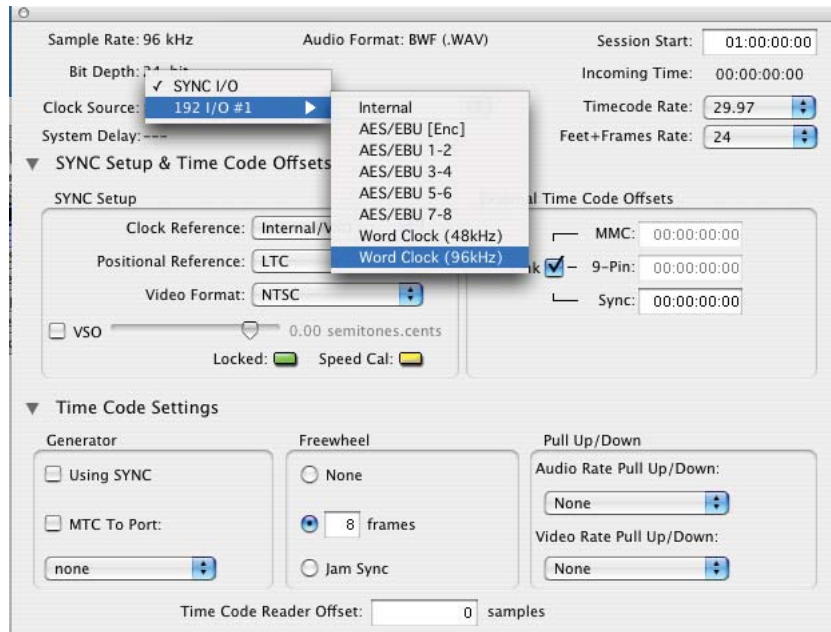4) Verify on the front panel of each audio interface that Sync Mode is set to EXT.
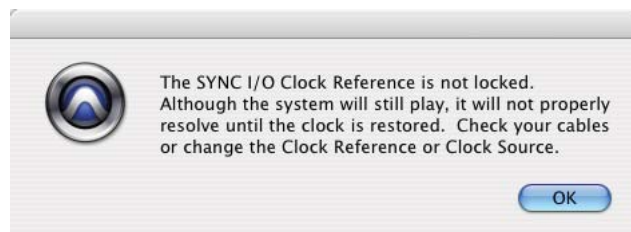
Using the Big Ben with a Sync I/O

When using a SYNC I/O with a Big Ben, we find it best to make the SYNC I/O the master and have the Big Ben lock to it. The Big Ben can then send its superior clock out to all of your audio interfaces. In the example below we are using 192's. However the setup would be the same if you were using AD and DA-16X's or Rosetta's connected via the X-HD option card. The only difference would be that the set up in Pro Tools is a bit simpler, as explained on Pg. 3 of this document.
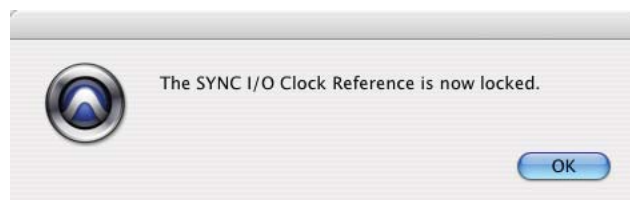
W/C Out of the Sync I/O to W/C In on the Big Ben. Do NOT use Loop Sync out!

Send a separate W/C Out of the Big Ben to the W/C In on each interface. Once again, Do NOT use Loop Sync!

1) Connect a 75 ohm BNC cable from Word Clock out of the Sync I/O to the Word Clock In of the Big Ben

2) Connect a 75 ohm BNC cable between the WC Out connections of Big Ben and the EXT In of each audio interface.

3) Do NOT connect the LOOP Sync connections between the audio interfaces or to the SYNC I/O. To best take advantage of Big Ben's superior clock, each interface must be connected directly to a Big Ben word clock output.

1) In Pro Tools under "Set Up"> "Session">"Clock Source"> "192 I/O #1, choose "Word Clock"
You will get a message that says "The Sync I/O clock reference is not locked" Click on the OK button.

2) Now do the same for the remaining 192's
3) Next, under "Clock Source" you will select "Sync I/O"
4) You should now see a message that says "The Sync I/O clock reference is now locked"

If you are using Apogee converters (AD/DA-16X's or Rosetta's via the X-HD card) and you are not using 192's at all, you will not have to do the following previous 4 steps. The Apogee units will automatically lock to external W/C when the Sync I/O is set to master.