

## INSTRUCTIONS FOR SMPTE AND MIDI SONG POSITION POINTER

### TO GENERATE SMPTE (STRIPING):

1. Press Sync input options button and select 4 (prnt).
2. Select the desired frame format (24F, 25F, 30F or 30D) by using the up and down arrows.
3. Using the right and left arrow and the 10-Key pad, enter the start time in Hours: Minutes: Seconds: Frames (for example: 00:00:15:00 would start the stripe at 15 seconds SMPTE time and continue until you press stop). The start time you choose is pretty much up to you unless you're working in film and video, where the start and end times will have an important relationship to a video cassette or film.
4. Make sure the "SMPTE OUT" (SYNC OUT on the 9000) is connected to the input of your tape recorder.
5. After putting your tape machine in record on the appropriate channel, press "enter" to start printing SMPTE code to tape. The Forat SMPTE card will respond to levels as low as -15dB but it's best to record SMPTE as hot as you can get away with.
6. To stop SMPTE generation, press "stop" after the desired time has elapsed. Remember to leave at least 10 seconds extra at the end. The 9000 will stop, if loop to bar is set to stop at end or it will loop to the entered bar when it reaches the end of sequence.

Example: You have a song which is 3 minutes long. No offset is usually necessary when generating code for audio interlock with the 9000, so you can just leave all values at 00:00:00:00 and, once your tape machine is in record, simply press enter to start generating SMPTE code. Allowing for an extra 15 seconds of pre-roll and 10 seconds of post roll, you would want to generate code for a total time of about 3 minutes 25 seconds, or until the readout reads 00:03:25:00.

### TO READ SMPTE:

1. Press "sync input options" button, and select 3 SMPTE.
2. If necessary, change the frame format to match the SMPTE printed on tape by using the up and down arrows.
3. Enter an appropriate offset time using the right arrow and the number key pad. The time you enter here is the SMPTE time at which you want the sequence to start playing and it should allow for at least 15 seconds "pre-roll". For example, if the SMPTE on tape starts at 00:00:00:00 you should enter an offset of 00:00:15:00. This allows time for the 9000 and the various tape machines to become locked together, and to run in synchronization.

Note: If no offset is entered, the 9000 may not play the first 8th note of the sequence.

4. Make sure the output of the tape recorder's SMPTE track is connected to the SMPTE IN jack on the 9000.

5. Once the offset has been entered, --:--:--:-- is displayed, indicating that the 9000 is waiting for SMPTE.

NOTE: While the 9000 is waiting for SMPTE to start, it will not respond to any pads or buttons but stop, record and cancel current operation until the SMPTE has started the sequence. You may enter in and out of record mode while the 9000 is waiting for SMPTE to start, by pressing the record button.

6. Start the tape machine rolling; the 9000 will display the incoming SMPTE code and starts the sequence at the offset entered at step 3.

Important: Tempo and offset are unrelated to SMPTE. To insure accurate SMPTE lock up to tape, the exact tempo and offset values for each song must be entered each time SMPTE is used. Make a record of these values for every song to avoid headaches! As of 7.09 software, you may save all user set variables such as Smpte start time and tempo, etc... to disk as part of a "Save All" file.

### MIDI SONG POSITION POINTER AND MIDI CLOCK

To read MIDI Song Pointer and MIDI clock press the "Sync input options" button and select 2 MIDI. While in this mode the 9000 responds to MIDI commands such as start, stop, continue and Song Pointer received on the MIDI input jack. You may enter record mode by pressing the record button while the 9000 is waiting for MIDI clock to start. The 9000 will not send MIDI Song Pointer or MIDI clock out of it's MIDI out jack while reading MIDI clock if this is desired, use the MIDI through on the 9000. MIDI clock is only sent while in play, record, SMPTE read or sync to tape modes.

If you have any questions please call Bruce Forat at (818)763-3007.