# MIDI Interface

#### For:

- Commodore 64/128, without tape
- Commodore 64/128, with tape sync
- Apple II +/IIe/IIGS without tape
- Apple II +/IIe/IIGS with tape sync
- Amiga 500/2000

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## **Sentech** Tape Sync

### **MIDI Interface**

This MIDI interface will generate a tape sync signal that can be recorded on a multi-track tape recording unit and sent back to the computer as the master clock. This device makes multiple trackoverdubs, quick and easy.

To generate the tape sync signal, the computer/software must be in the "internal clk" mode (Sentech sequencers). Starting the sequencer in this mode will automatically start sending the sync tone signal to tape (recommended PPQN of 96). For other software products please refer to their instruction manual for set-up.

#### What you will need:

- 1) Appropriate MIDI cables
- 2) Two mini phono cables or (phono to mini phono adapters)

#### **Operation Guide**

- 1) With power off insert the MIDI interface
- 2) With power off insert appropriate MIDI cables
- 3)Locate tape in and tape out "female mini phono jacks." With the power off, run the "tape sync out" of the interface to the "audio track in" that you wish to have as your synchronization track
- 4) Run the audio out of your synchronization to the "tape in" on your MIDI interface

#### Recording a Sync Tone

1) When using Sentech sequencer products, you must set the clock to the INT CLK (internal clock) position. When you start the sequencer it will begin to generate the tape sync signal (Sentech sequencers will generate a signal in this clock setting only)

- 2) Record this signal at approximately -5DB.

  Depending on what kind of tape recorder you are using, possible fine tuning may be necessary
- 3) Begin the signal at the position on tape you wish the music to begin
- 4) Record the signal from the beginning to the end of the piece

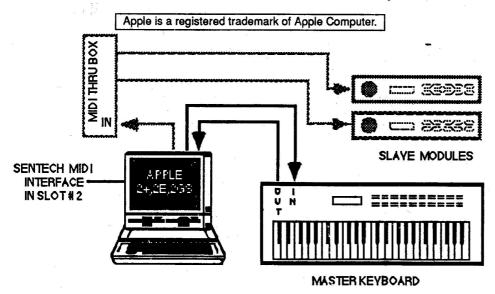
#### Syncing the Computer to Tape

- 1) You have already recorded your tape sync signal and now wish to slave your computer to the sync signal
- The audio out of this track is running into the "tape sync in" of the MIDI interface
- 3) Rewind your tape to the beginning
- 4) Change the clock setting on your software to external sync
- 5) Start the sequencer and it will wait until you start rolling the tape. When the computer receives the signal it will start the sequencer

#### **Trouble Shooting**

- 1) Check all connections
- 2) Experiment with the record levels
- 3) Some multi-track recorders have cross-talk Make sure you use an "outside track", if possible
- 4) When playing back the signal to the computer "tape in", adjustments on playback levels and possibly EQ can affect the synchronization reliability

- The Sentech Apple MIDI Interface plugs into the #2 expansion slot of your Apple 2E, 2+ or 2GS computer. No other modifications to the computer are required.
- The illustration below is only one of many possible configurations and is intended as a basic guide only. If you do not have a large number of MIDI devices, the MIDI Thru box may not be required.
- The 2 MIDI OUT jacks are identical and interchangable.
- Due to rear panel space limitations, the interface card is installed with the MIDI jacks facing toward the FRONT of your computer. With the power off, open the top cover and gently seat the card into the #2 slot. Remove the #2 rear panel cover to provide an entrance for the MIDI cables. Carefully plug the cables into the MIDI jacks and route them alongside the card to the rear panel, leaving a little bit of slack inside. Tie or tape them securely to the back of the computer to prevent stressing the interface accidentally.



NOTE: MODEM PORT (SLOT #2 ) ON YOUR APPLE II GS MUST SET UP FOR YOUR CARD IN ORDER TO USE THIS MIDI INTERFACE CARD.

REFER TO THE FRONT PANEL SET UP IN YOUR APPLE II GS MANUAL FOR SET UP PROCEDURE.

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