MASTER TRACKS

USERS MANUAL

"The Music Software Source



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Table of Contents

1.) In	troduction
2.)	Main Sequencer - Real Time
	Tutorial
	Format Page
	Basic Track Controls Main Page2 / 10
	Playback Commands Dlsk Page
	Using Data Disks
	Edit Page
	Utilities Page
3.)	Quikstep Editor - Step Time
	Tutorial 3 / 1
	Basic Single Step Recording Quikstep Main Page
	Editor Features Step Editor Page
	Step entry of notes, chords and other information
	Converter Page
	Disk Page3 / 1 Quikstep disk functions
	Utilities Page
	Quikstep System Controlls
4.)	Song Mode
	Tutorial
	Song Page
	Constructing / Saving / Loading a song Playback Page
	Playing a song

5.) Getting Things Done - The Basics Recording and Playback

	neal fille necolality	3/1
	Mixing Tracks	5/2
	Linking Tracks	5/3
	Looping Tracks	5/3
	Channelizing Data	5/3
	Saving and Loading Sequences	
	Saving Sequence Files	5/4
	Loading Sequence Files	5/4
	Changing Information	
	Solo / Mute	5/4
	Transposing	5/5
	Changing Tempi	5/5
	Autocorrecting Tracks	5/5
	Working with Drum Machines	5/6
6.) Ma	aster Classes - Advanced Techniques	
	Single step entry	6/1
	Punch In/Out	6/1
	Step Editing	6/2
	Combining Step and Real Time Information	6/2
	Adding to a Track	6/3
	MIDI Delay	6/4
	Transposing Single Tracks	6/5
	Synchronizing to Tape or MIDI	6/6
	Recording with a multi-track Tape Recorder	6/6

APPENDIX

- 7.) Appendix 1 II+ changes to manual
- 8.) Appendix 2 //c changes to manual
- 9.) Appendix 3 List of default Quikstep note values
- 10.) Appendix 4 Partial list of controller numbers for use in Quikstep
- 11.) Appendix 5 Reference Cards

Introduction

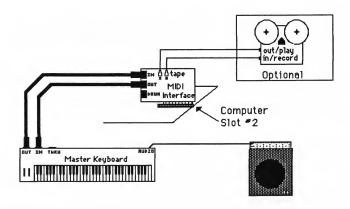
Welcome to **Master Tracks** [™], Passport's integrated professional composing, recording and editing software for MIDI instruments.

Hardware Requirements

The following equipment is necessary to use Master Tracks:

- An Apple //e, II+ (see Appendix 1) or //c (see Appendix 2) computer with 64k RAM memory.
- 2. One disk drive and controller (two disk drives recommended).
- 3. Video monitor.
- 4. Game controllers (paddles prefered, joystick acceptable) for Quikstep Editor.
- 5. One Passport MIDI Interface ™ for the Apple //e (MH-01A) or the MIDI PRO Interface for theApple //c (MH-01X), and at least two 5-pin DIN cables. To take advantage of Master Tracks' Tape Sync features, you must use the Passport MIDI Interface with Tape Sync ™ (MH-02A) for the Apple //e or the MIDI PRO Interface for the //c. We cannot guarantee that Master Tracks will work properly with "Imitation Copies" of the Passport MIDI Interface.
- Please Note: The MIDI Interface card must be mounted in <u>slot #2</u> of your Apple to insure the proper working of this program. Consult the diagram on the next page and your Interface users' manual for a more detailed explanation of card installation and correct cable hook-up.
- One or more MIDI equipped synthesizer(s).
- 7. Amplifier, headphones, or other audio monitoring system.
- Optional: MIDI Drum machine. Non-MIDI drum machines with independent external start/stop and clock inputs can be used with the addition of Passport's drum sync cable (DCK-1). Please refer to your Interface manual for specific information about non-MIDI drum machines.

Basic Setup Diagram:



How Does This Thing Work?

To load Master Tracks follow these simple instructions:

- 1. Before turning the computer **ON**, place your Master Tracks program disk in drive #1 (your primary disk drive).
- 2. Now turn your computer ON.
- 3. Turn all of the instruments connected to your MIDI Interface ON.

Note: Apple II users, make sure that the CAPS LOCK key is down!

Master Tracks will automatically load and start up. Leave your Master Tracks program disk in drive # 1 for now.

Master Tracks is an integrated music productivity tool for composing, recording and playing back high quality music. It is the 1-2-3 of MIDI sequencers.

1) Real Time - Recording, Editing and Playback

Master Tracks contains an enhanced real time recording system based on Passport's MIDI/8 plus ™. You record live multi-track **Sequences** in the real time section by playing on any MIDI instrument. Track editing facilities such as Mix, Link, Autocorrect and Punch In/Out are provided.

Sequences are composed of individual Tracks of MIDI data and are the basic musical storage unit used by Master Tracks. Sequences are stored on your data disks with a ".M8" suffix attached to the filename. For example "SEQUENCE.M8" is an example of a Master Tracks Sequence. Master Tracks uses the same file format for Sequences as MIDI/8 Plus.

2) Step Time - Recording, Editing and Playback

Master Tracks contains a powerful step input and editing system called Quikstep™. Quikstep lets you build **Step Files** by inputting information from any MIDI keyboard in step time. Complete visual editing facilities are provided for **Step Files** using a set of game paddles or joystick and your computer keyboard.

You record **Step Files** in the Quikstep section. **Step Files** can be played back in Quikstep or converted to Tracks for playback in the real time section or song mode. Conversely, live Tracks can be converted to **Step Files** for visual step editing. **Step Files** are stored on your data disks with a "QK." prefix attached to the filename. For example "QK.STEPS" is an example of a Quikstep **Step File**.

3) Song Mode - Composing, Editing and Playback.

Master Tracks contains a versatile Song Mode for composing and editing songs like you would with a drum machine. Individual **Sequences** can be joined together to form complex **Song Files**. The Song Mode is one of the most powerful compositional features of Master Tracks.

You create and playback **Song Files** in the Song Mode section. **Song Files** are composed of different **Sequences** linked together. **Song Files** are stored on your data disks with a ".MS" suffix attached to the filename. For example "SONG.MS" is an example of a Master Tracks **Song File**.

You might begin a typical session with Master Tracks by laying down some basic rhythm parts for your intro, verse and chorus with Quikstep. These Step Files can then be converted to Tracks. You might then overdub a live bass line and acompaniment in the real time section, as well as a solo line. Any Track can be converted to a Step File for step editing and variation and then be reconverted back to a track. You would store Sequences on disk for your intro, verses and chorus. You can then assemble the various Sequences into a Song File in the Song Mode and experiment with different arrangements. Finally, you can play back your Song File in the Song Mode and even synchronize it to tape for final recording.

Main Sequencer Real Time Recording and Playback

Tutorial

This section will show you step by step how to record in real time using Master Tracks.

Hardware Set Up

This section is designed to work with a single MIDI keyboard. (See Appendix 1 for recommended multi-keyboard set-ups.)

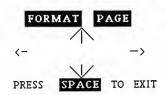
Connect MIDI OUT on your Interface to MIDI IN on your keyboard.

Connect MIDI IN on your Interface to MIDI OUT on your keyboard.

Set your keyboard to receive on MIDI Channel # 1 (Consult your keyboard owners manual if you have trouble doing this).

"Boot" your Master Tracks program disk. After loading the program will display the Format Page.

TD	FUNC	CH	PRE	INSTRUM	CHT
	TUBL	СН		TUDIKAN	**********
1	» OFF	01	001		
2	OFF	01	001		
3	OFF	01	001		
4	OFF	01	001		
5	OFF	01	001		
6	OFF	01	001		
7	OFF	01	001		
8	OFF	01	001		



Recording a track

- Step 1 The Format Cursor > will be pointing at track #1.
- Step 2 Press R to switch track into REC (record).
- Step 3 Move the Format Cursor using the → key to BEATS and type in a number (1 thru 9), to give yourself a metronome count and set the clock timing for the recording (i.e. 4 for 4/4 time 3 for 3/4 time etc.)
- Step 4 Press the space bar to exit the Format Page. You will see the Main Page menu displayed below the Track Display.

USED: 00016

CLOCK: 001.1.00

LEFT: 36591

DISK / EDIT / FORMAT UTILITIES / QUIKSTEP / SONG PRESS SPACE BAR TO RECORD OR PLAY

- Step 5 Press the space bar again to start recording. The program will automatically count off the number of Beats you set in step 3.
- Step 6 Play something simple on your keyboard like a bass line or chord progression.
- Step 7 Press the space bar to stop recording. You will automatically return to the Format Page.
- Step 8 Important! Position the Format Cursor using the right and left arrow keys under the FUNC column for track # 1 and press P to set the track in PLA (play) if you do not do this the track will remain in Record and you will erase what you have just played.
- Step 9 Press the Space ball to exit Format Page.
- Step 10 Press the Space bar to begin playback. You should hear your track playback on your keyboard. You can change the sound on your keyboard using your synthesizer's control panel.
- Step 11 You can stop and restart playback by pressing the Space key once to stop and twice again to start. When ready to move on, stop playback and return to the Format Page.

Recording a second track

- Step 1 From the Format Page press ESC or the up and down arrow keys to switch the format cursor to point at track # 2. Use the «- and -> keys to position the cursor under the FUNC column on track # 2.
- Step 2 Press R to switch track #2 to REC (record). The previous track will automatically switch to PLA (play).
- Step 3 Press the space bar to exit the Format Page.

USED: 00016

CLOCK: 001.1.00

LEFT: 36591

DISK / EDIT / FORMAT UTILITIES / QUIKSTEP / SONG PRESS SPACE BAR TO RECORD OR PLAY

- Step 4 Press the space bar to begin recording.
- Step 5 Play your keyboard to overdub a new part. You should hear your first part play back while you are recording the second part.
- Press the space bar to end recording. Step 6
- Repeat steps 1 6 to record another track if you wish. Step 7

Optional

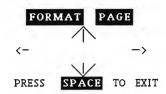
You can change the tempo during playback by pressing the ⇒ key to Step 8 increase playback speed and ≪- to decrease playback speed.

This tutorial has shown you how to record and playback tracks in real time. The following pages will explain the real time section in detail and show you how to use Master Tracks.

The Format Page

The first Page you will see upon entering Master Tracks is the Format Page. This is where you will setup the track controls for recording and playing back multi-track sequences. You get to the Format Page from the Main Page by pressing F.

•••••	(¢)		PASSPORT I	INSTRUMENT
18	FUNC	CH	PRE	THZIKOMENI
1	» OFF	01	001	
2	OFF	01	001	
3	OFF	01	001	
4	OFF	01	001	
5	OFF	01	001	
6	OFF	01	001	
7	OFF	01	001	
8	OFF	01	001	



The upper portion of this Page is called the track display. This is where you will find the current status of your tracks.

The lower portion of the Page will always inform you of what you are doing and which command keys are currently valid. We will refer to this portion as the command display.

The Format Cursor

Looking at the **track display**, you will find a <u>flashing</u> >. When this **format cursor** points to an item, that item is changeable. Moving this cursor around the **Format Page** is done by using :

- □≫ (The right arrow key) to move the format cursor to the <u>right</u>, through FUNC, CH, PRE, INSTRUMENT, at the top of the Page, then to TEMPO, TRANS and BEATS.
- «- (The left arrow key) to move the format cursor to the left.

ESC or the Up and Down arrow keys, to select the track you are working on. (TEMPO, TRANS, BEATS and THRU are common to all tracks.)

This format cursor "wraps around", meaning that if you keep pressing the right arrow key until you pass THRU, the cursor will pop up again at FUNC. ESC will likewise bring you from track #8 to track #1.

FUNC (Function)

When the **format cursor** points to the **FUNC** column, you may choose to have the track it points to either **REC** (record), **PLA** (play), or turn **OFF.** Press **R** for **REC**, **P** for **PLA** or **O** for **OFF.** Only one track at a time may be in **REC**.

Note: Apple IIe and Franklin users, make sure that the <u>CAPS LOCK</u> key is down!

<u>CH</u> (MIDI Channel Assignment)

When the **format cursor** points to the **CH** column, you may choose the **MIDI channel** for that track. You choose the MIDI channel by typing a number from 1 to 16, or by selecting a 20 for "no channel".

Channel assignment is mainly a concern when you are controlling several MIDI-equipped instruments, which support the <u>OMNI OFF</u> MIDI mode (or if you have one instrument that can receive multiple MIDI channels like the Casio CZ-101). If you have only a <u>single-channeled</u> instrument, or if your instruments function in <u>OMNI</u> mode only, leave all channels set to 01.

If you have multiple instruments it is useful to set them to receive consecutive MIDI channels and leave them set that way. This way you will always know for example, that your DX-7 is channel 1 and that your Expander Module is channel 2, etc.

The CH value acts as a kind of a channel "Mask" for recording and playing back MIDI data. Master Tracks assigns a MIDI channel to MIDI data when it is recorded. This channel value is that data's permanent MIDI channel. Master Tracks also lets you reassign a MIDI channel during playback. This channel value is that data's piayback channel.

Permanent channel assignment

When data is initially recorded it is assigned a MIDI channel depending on the value set in the CH column. If the setting is channel 01 thru 16, the data is stored with that channel number in memory when it is recorded. That channel will remain a permanent part of that MIDI data's information.

If the **CH** setting is @0, then no MIDI channel will be assigned to the data during recording. The MIDI data will be recorded "literally" on whatever channel (or channels) being sent from the MIDI instrument.

Mixing two tracks containing MIDI data on two different channels into a single track, will create a **multi-channel track**. With Master Tracks it is possible to have data on all 16 MIDI channels mixed into a single track. (see Edit Page in Real-Time section).

Converting a track to a step file and back (see Quikstep Convertor) allows you to modify a track's Permanent channel assignment if you wish.

Playback channel assignment

During playback you may override a track's permanent channel(s). Simply move the format cursor to point at the track whose channel you wish to change and type a new channel number 1 - 16. The **CH** setting has no effect on a track's permanent channel assignment during playback. You may experiment with any **CH** setting during playback without permanently affecting the MIDI data.

A **CH** setting of 00 will playback the MIDI data on whatever permanent channel (or channels) that the data is stored with. When the **CH** setting is 00, the MIDI data will play back on whatever permanent channel(s) it was recorded on.

A CH setting of ©0 will be automatically set whenever you mix two tracks together into a single track. This way, multi-channel MIDI data can play back on a single track.

Please note: In order to hear a channel assigned track play-back you must set the receive channel number on your synthesizer(s) to match the specific track's output channel number. Consult the owner's manual of your synthesizer for instructions on setting the instrument's receive channel and receive channel mode.

PRE (Preset)

This column serves as a remote control for automatically setting the **preset** (program number) on your synthesizer at the beginning of a track. When a track is set to **PLA** the synthesizer will automatically switch to the selected **preset** number on playback. The preset numbers can be selected either from your **synthesizer's control panel**, or by typing the **number** on your computer keyboard. Valid preset numbers are 01 thru 128. A setting of 0 will make the sequencer <u>not</u> send any preset change command for that track. If you enter an invalid number Master Tracks will not let you move on until the entry is corrected.

Other things to be aware of when changing presets:

- * Entering preset number 128 does not mean that you have 128 preset sounds in your synthesizer. Make sure that the preset number you type in matches one that actually exists in your synthesizer.
- * If two or more tracks are set to the same MIDI **channel**, then the preset with the lowest numbered track has priority.
- * Remember, this is only the **starting** preset for the track. If you make a preset change on your master instrument while recording, the **preset change** will also be recorded with the notes you play. Your instrument will automatically make all preset changes every time you play the track back, even if you change the starting preset.
- * Some instruments use unusual codes to indicate presets (i.e. a letter for memory bank or a "base 8" numbering system), in these cases the preset number on the Page may differ from the display on your instrument's control panel. Don't panic, it will still work correctly.
- * Some instruments have an external program select or preset protect function which must be manually switched on or off before it can accept preset commands from Master Tracks. Consult your instrument's owners manual for details.

INSTRUMENT

This column provides you with a place to make comments about each track. In a multiple keyboard arrangement it can get confusing as to which channel controls which instrument. Notating which instrument (i.e. DX7, CZ, Korg, etc.) or which sound (i.e. horn, violin, flute, etc.) is controlled by the track will make it easier to remember what is going on with your setup. Just type the name (limited to 12 characters) and press Return. To change any name simply type over the old name and press Return once again.

Please note: This is <u>only</u> a means of labeling a track; it <u>does not</u> affect the channel setting; you must set that in the CH column.

COMMON TRACK FUNCTIONS

Below the track specific functions you will find four settings that affect all tracks.

TEMPO

This represents both the tempo for record and playback speed, as well as the metronome (click track) you will hear when recording. The number represents beats-per-minute and has a valid range from 25 to 200. Type in a number and use the arrow keys to move on. If you type in any number outside the "legal range" Master Tracks will not let you move on until it is corrected.

During **playback** you may use the -> and <- keys to increase or decrease the tempo. You may also change the tempo in a sequence by entering a tempo change command via Quikstep (see section 3). This tempo change is automatically displayed as the sequence plays back.

Please note: Tempo \underline{only} is active if your master clock is set to $\underline{Internal}$ in the Utilities Page.

TRNS (Transposition)

After a sequence has been recorded you may use this feature to **transpose** it to a different key. This makes it possible for you to record a sequence in a key which is comfortable to play in, then play it back in the key in which you wish to hear it in.

You can transpose any sequence up or down 24 half steps (two octaves). To transpose a sequence type either Φ (for up) or Φ (for down) followed by the number of half steps you wish to transpose by (1 thru 24). Numbers entered without a Φ or Φ will be assumed to be a "+" and will be transposed up.

You can transpose individual tracks up and down when converting to and from Quikstep or by using the technique described in the Advanced section of this manual.

BEATS (Beats Per Measure)

Beats are used to set the **clock** readout correctly, and also to set the **metronome** to "count off" a measure before recording begins. To set beats per measure, point to **BEATS** with the format cursor then type 4 for 4/4 time, \$\infty\$ for 3/4 time, etc. Valid settings here are 0 thru 0; if set to 0 the metronome is **off** and the measure counter defaults to a two beat measure.

NOTE: Notes or chords held down during the count-in beats will be recorded as if you played them on the first beat (downbeat). This feature lets you set-up a chord or note for precise recording on the downbeat.

Common track functions cont.

THRU (MIDI Thru)

This feature allows you to echo(pass) any MIDI information received by your Passport MIDI Interface through your interface's MIDI OUT. In other words you can control an instrument connected to the MIDI OUT of your Interface, from an instrument connected to the MIDI IN, as if there was a direct connection between them. This is particularly useful when using several slave sound modules from a controller keyboard. MIDI THRU has no effect on a track's permanent MIDI channel during recording.

To assign a specific channel to "echo", point to THRU with the format cursor and type a number (1 to 16).

Selecting a THRU channel of 00 will turn MIDI THRU Off.

Exiting the Format Page

When you are satisfied with all the changes you have made, press the Space bar to move on to the Main Page. If you accidently press the space bar before you are ready to leave the Format Page, press F to return to the Format Page.

The Main Page

When you exit the Format Page you will find yourself on the **Main Page**. The Main Page is where you actually record and playback multi-track sequences. Note that the track display portion is still present; however the format cursor has disappeared. You have no control over format parameters while in the Main Page. The command display has now been replaced by the Main Page menu:

	(C)		ASSPORT	DESIG		
(R	FUNC	CH	PRE		INSTRU	MENT
1	OFF	01	001			
2	OFF	01	001			
3	OFF	01	001			
4	OFF	01	001			
5	OFF	01	001			
6	OFF	01	001			
7	OFF	01	001			
8	OFF	01	001			

USED: 00016

CLOCK: 001.1.00

LEFT: 36591

DISK / EDIT / FORMAT UTILITIES / QUIKSTEP / SONG PRESS SPACE TO RUN

USED / LEFT (MEMORY)

The numbers which follow **USED** and **LEFT** display how much memory (in bytes) you are using in your sequence and how much is left. While recording, these numbers will change every time you enter an **event** (note on, note off, preset change, pitch bend, modulation, ect.). Be aware that some types of events consume more memory then others (i.e. after touch, pitch bend - see Utilites Page).

CLOCK

The clock lets you know where you are in your sequence. The numbers in the clock stand for:

nnn	n	nn
(Measure number)	(Beat)	(MIDI Clocks)
001-999	1-9	00-23

MAIN PAGE PLAYBACK COMMANDS:

START / STOP (Record and Playback)

Pressing the space bar from the Main Page will start record and playback. When the sequencer is running pressing the space bar will stop record and playback and return you to the Format Page.

TEMPO CHANGE

Use the → and ← keys to increase or decrease the tempo during playback.

MUTE

Pressing keys 1 thru 8 will mute, or un-mute the corresponding track during playback. Press 0 to un-mute all tracks.

SOLO

Pressing SMM and keys 1 thru 8 will let you hear the corresponding track in solo, all other tracks will be muted. Press the 0 key to un-solo. (NOTE: The Apple II+ has different SMM number keys - see Appendix 1 for the correct Solo keys.)

PAUSE

While the sequencer is in playback mode and running, you may **pause** at any time by pressing @@@. You can move forward / backward in the piece or Punch In (Record) while the sequencer is paused with the following five commands:

- Fast forward.* Pressing the F key when paused will cause the sequencer to fast forward. Press any other key to return to pause.
- Rewind.* Pressing the R key when paused will cause the sequencer to fast reverse. Pressing any other key will return the sequencer to pause.
- Single step forward.* Pressing the » key will move the sequencer ahead 1 clock. You will hear the piece playback when single stepping forward. There are 24 clocks, numbered 00 to 23, in a beat. This is not affected by the number of beats in a measure or the value of the beat note. 24 clocks per quarter note is MIDI standard time.
- Single step rewind.* Pressing the <a key will move the sequencer back 1 clock. You will not hear playback when rewinding.</p>
- Space Stop Playback and return to Format Page.

Return - Punch In at point indicated by the clock. (Proper track must be previously selected - see the following instructions and the Utilites section.)

* Please Note: Non-MIDI drum machines will not stay in sync with your sequence when these Pause features are used.

MAIN PAGE RECORDING COMMANDS:

Real Time Recording

Use the arrow keys(and/or ese) to choose a track and then press R to set that track to Record. Pressing the space bar will then start the recording of the chosen track while playing the other tracks (if any).

Real Time Punch In and Out

You may Punch In to record mode to correct playing errors on any track in real time. This is done by first calling up the Utilities Page and choosing the track you wish the Punch In to take place on (See Utilities Page). After selecting the track to Punch In on, begin playback on the Main Page by pressing Space. When your sequence is playing back, simply press the Return key to Punch-In.

When you Punch In Master Tracks will switch the pre-selected track to record, and a "*" will apear next to the affected track for your convenience. When you have completed the Punch In press Return again to Punch Out.

Punching In and Out of a track will erase the previously recorded section and replace it with whatever you played after Punching In. You can "Trim" a track and cause it to end by Punching In to a track and pressing Space instead of Return to Punch Out. This will cause the track to end at the nearest full beat after you press the Space bar. This is useful for "undoing" a link or for shortening a track for any reason.

PLEASE NOTE: You can only Punch in **once** per take. To Punch In again you <u>must</u> reset the Punch In track on the Utilites page

Pause Mode Punch In and Out

You may Punch In to **Record** mode while the sequence is paused. This is useful because you can use the arrow keys or fast foward / rewind to move to the desired punch in spot for making fast and precise editing changes to a real time track.

This is done by first calling up the Utilities Page and choosing the track you wish the Punch In to take place on (See Utilities Page). After selecting the track to Punch In on, begin playback on the Main Page by pressing Spage. When your sequence is playing back, press seg to PAUSE playback.

You can now enter the Record mode by pressing redurn. The sequence will remain paused but in the Record mode. Pressing any other key (except the space bar or return) will then resume normal playback tempo - in the record mode.

Pressing redurn will stop Punch in and continue playback; pressing the space key will stop all playback and erase the remainder of the Punch in track.

PLEASE NOTE: You can only Punch in once per take. To Punch In again you must reset the Punch In track on the Utilites page

Main page Record Commands cont.

Single Step Recording (from the Main Sequencer Pause Mode)

After pausing playback by pressing @S@, you can enter the Punch In mode and record a single note or chord at a time by pressing require then advancing the clock forward by pressing the ~> key for each MIDI clock you wish to record.

For example: If you wish to Punch In a single chord you would press return from the paused mode, hold down the keys on your MIDI keyboard for the chord you wish to play, advance the clock by pressing -> each time for the number of MIDI clocks you wish the chord to be on, and then release the keys on your MIDI keyboard. You must then advance the clock for the number of clocks you wish a rest to play following the chord. Punching Out is acomplished by pressing return. You can also "Trim" a track (erase the end) in Step Time Punch In by pressing the space key after Punching In.

PLEASE NOTE: You can only Punch in **once** per take. To Punch In again you <u>must</u> reset the Punch In track on the Utilites page

The Disk Page

You enter the **Disk Page** from the Main Page by pressing D. All disk access functions for **Sequences** are performed from the menu on this Disk Page. This Disk Page lets you load and save sequence files with a ".M8" suffix. You do not have to type the ".M8" suffix. (Disk access to Quikstep files and Song files <u>must</u> take place from the Disk page of their respective sections.) Throughout the program, Master Tracks will allow you to work with filenames up to 15 characters long (not including prefixes or suffixes).

DISK PAGE

C CATALOG DISK

L LOAD FILE

S SAVE FILE

D DELETE FILE

R READ MIDI/4 W WRITE MIDI/4

CONTROL - I INITIALIZE
DATA DRIVE=1 (ESC)
PRESS SPACE TO EXIT

Using Data Disks

Catalog

Press © to view a catalog (listing) of the files stored on the chosen data disk.

Sequence names will be listed by their name followed by their file type ".M8"

(i.e. MINUETTO . M8). Press any key on the computer to return you to the Disk Page.

Loading a sequence file

To load a sequence from your data disk; first press L to load a data file, then type in the file's name and press Require. MIDI/8 Plus files may be loaded directly into Master Tracks. You do not have type the ".M8" suffix.

Saving a sequence file

To save a sequence to your data disk, press S. You will be asked for the name of the file (sequence) to be **saved**. Type in the name of your sequence at this time and press Return. You do not have to type the ".M8" suffix.

Deleting a sequence file

If you decide that you no longer wish to have a Master Tracks sequence stored on your data disk, you may **delete** it. Press D and you will be asked to name the file. Type in the file's name and press Return. Just as a precaution your computer will now ask you "Are You Sure", enter Y to delete your file, or N to come to its rescue. Remember: If you delete a file you cannot retrieve it!

Reading a MIDI/4 or 4 Plus File

Master Tracks lets you use existing MIDI/4 or MIDI/4 Plus files by automatically converting them to Master Tracks sequences. To read a MIDI/4 file from a data disk; first press $\mathbb R$ to read a MIDI/4 file, then type in the file's name and press $\mathbb R$ @turn. As with regular sequences, you do not have to type the ".M4" suffix on the MIDI/4 filename.

Writing a MIDI/4 Plus File

You can save tracks 1-4 in a Master Tracks sequence as a MIDI/4 Plus file. This would be useful for saving files for use with Passport's MIDI/Player. To write a MIDI/4 Plus file to a data disk, press W. You will be asked for the name of the MIDI/4 file to be written. Type in the name of the MIDI/4 Plus file at this time and press Return. You do not have to type the ".M4" suffix.

Working with a Single Drive System

If you are using a system with one disk drive, you will need to keep your Master Tracks program disk in the drive most of the time. When you need to load or save a file, you should remove your program disk and insert your data disk to perform the disk operation. When finished, you should reinsert your program disk in drive one.

WARNING! Do not initialize or erase your Master Tracks program disk!

Working with a Two Drive System

If you are using a system with two disk drives, you may keep your Master Tracks program disk in drive one and your data disk in drive two. When using a two drive system, press ESC on the Disk Page to toggle the data drive to either drive one or drive two.

About Data Disks

Data disks are used to store your sequences, song files, Quikstep setup and step files. We recommend that you save your work to disk as often as possible as you are recording or editing and make a backup copy of any file you wish to keep. Before beginning work with Master Tracks we would advise formating at least one blank data diskette. (See Initializing data disks.)

Initializing Data Disks

To Initialize a Disk, place a blank diskette (or one you wish to erase) into the data drive and press CONTROL and I simultaneously. Answer Y to the prompt to initialize your data disk.

WARNING - Initializing a diskette will ERASE the disk. Use only blank disks or disks that have data you do not want to keep. Exercise caution when Initializing data disks - Do not initialize your Master Tracks program disk!

Exiting the Disk Page

When you have finished all of your disk operations, press the space bar to return to the Main Page. If you accidently press the space bar before you are ready to leave the Disk Page press D to return to the Disk Page.

The Edit Page

The **Edit Page** can be reached from the Main Page by pressing **E**. You must have your program disk in drive number one in order to enter the Edit Page. If you do not, Master Tracks will prompt you to do so. Once you have recorded your sequence, the Edit Page will provide you with several options to modify or manipulate it on a track by track basis.

FDIT PAGE

A AUTOCORRECT TRACK
E ERASE TRACK
L LINK TRACK
M MIX TRACKS

PRESS SPACE TO EXIT

Autocorrecting a track

Autocorrect is a feature which adjusts recorded events such as keypresses and other MIDI data to a given rhythmic precision. Autocorrect adjusts the timing of MIDI events to a given division of a beat, aligning the events to the nearest beat division.

To Autocorrect: Press A when on the Edit Page. You will be prompted:

AUTOCORRECT TRACK # (1-8):

TYPE CTRL-A FOR ALL PRESS SPACE TO EXIT

If you wish to Autocorrect just one track, enter its number (1 thru 8). If you want all tracks to be auto-corrected to the same amount, hold down the CONTROL key and press $\mathbb A$.

After you make your selection you will be prompted:

AUTOCORRECT TRACK # 1

1.	QUARTER	(1)
2.	EIGHTH	(2)
3.	8TH. TRIPLET	(3)
4.	SIXTEENTH	(4)
5.	16TH. TRIPLET	(6)
6.	THIRTY-SECON D	(8)
7	32ND TRIPLET	(12)

Enter the number displayed on the left side of the autocorrect resolution you wish. For example, if you want the timing of all MIDI events in the track to be rounded to the nearest eighth note, you would enter 2 for eight notes. Answer the prompt 7 to autocorrect the track.

In MIDI, the standard 24 clock beat is presumed to be a <u>quarter note</u>. The numbers in the right hand column indicates the relationship of the resolution to the "standard beat" (there is 1 quarter note in a beat, or 12 thirty-second note triplets). If you are working in a non-quarter note time you will need to choose autocorrect resolution by clocks rather than name (i.e. with an eighth note beat, resolution setting #2 is actually sixteenth note resolution).

Remember: Autocorrect is for fine-tuning acceptable tracks. It can not salvage a really sloppy track. However, notes with durations shorter than one half of the selected autocorrect value will be eliminated from the file. Start with short duration values and listen to the track playback. Correcting to triplet values will round off and shift all timing to the nearest triplet value, so use this only when your entire track is composed of triplets.

Remember also that an auto-corrected track cannot be un-corrected. We recommend saving your sequence to disk (or make a copy of the track-see Linking Tracks) before using autocorrect, and also saving any results that sound good to you before autocorrecting again.

Erasing a track

There are two ways that you can eliminate an unwanted track. One simple way is to record something else into it, such as the next new track, or just press page to record a stop code and end the track.

A more efficient way of eliminating tracks is to erase them from memory completely. This is done by typing $\[mathbb{E}$ for **erase** while in the Edit Page. You will be prompted:

ERASE TRACK # (1-8):

TYPE CONTROL-A FOR ALL PRESS SPACE TO EXIT

You may erase an individual track by entering its number, or all tracks by holding GONTROL and pressing A. After making your selection, you will be asked "Erase Track?" . Press either $\, \mathbb{Y} \,$ (yes) or $\, \mathbb{N} \,$ (no). Remember: Once you have erased a track you cannot get it back

Linking tracks

This feature allows you to copy data from one track (the source) and "link" it to the end of another (the destination). When linking tracks, your **source track** remains in its original form, even though its information now has been added to your **destination** track

To Link tracks

Press & while in the Edit Page. You will be prompted:

LINK A TRACK

SOURCE TRACK # (1-8): DESTINATION TRACK:

PRESS SPACE TO EXIT

After entering the source and destination track numbers, you will be asked to confirm your choice. Remember: <u>Once you have linked two tracks, they cannot be "un-linked"</u>. However, it is possible to "undo" a link by punching in to the destination track and "trimming" it off before the linked section. (See Punch In on Main Page).

After linking, you may change any aspect of the source track without affecting its copy in the destination track. You can take that same source track and repeatedly link it to any destination track for "pattern" effects. Tracks can be linked to themselves. You can build up varying patterns when you edit or mix the source track in between links.

Linking tracks can be more advantageous then looping them. When a track is looped it will repeat the <u>same</u> pattern, again and again, <u>without variation</u>. For example:

Part A/ Part A/ Part A/ Part A/ Part A/ Part A/ Part A/....

Linking tracks, gives you the ability to build repeating and <u>varied</u> patterns out of <u>different</u> segments repeatedly linked end to end. For example:

Part A/ Part B/ Part A/ Part B/ Part C/ Part A/ Part B/....

To Copy Tracks

Linking a source track to an empty destination track is a convenient way of making a copy of that track. This feature is useful for making a copy of a track before mixing it with another track or autocorrecting it.

Mixing tracks (Bouncing)

Although at first sight Master Tracks may appear to be an "eight- track" sequencer, it is by no means restricted to the eight tracks appearing in the track display. In reality Master Tracks is an unlimited-track recording system. By mixing tracks, you can overdub and layer many tracks of MIDI data into a single track for playback.

The **MIX** feature allows any two tracks to be blended into a single track. <u>All</u> information including MIDI channel assignment is "mixed down" to a single track without losing performance quality.

To mix tracks: Press M while in the Edit Page. You will be prompted:

MIX 2 TRACKS

SOURCE TRACK # (1-8) DESTINATION TRACK:

PRESS SPACE TO EXIT

After choosing your source and destination tracks, you will be asked to confirm your choices. Press \mathbb{Y} (yes) or \mathbb{N} (no). If you choose Y, the disk will start up and your tracks will be mixed together. This process erases your original source track and turns its FUNC "OFF". The destination track's CH setting will be automatically set to "00", setting your mixed MIDI data for multi-channel playback through a single track.

Remember: Tracks can be re-mixed as many times as you like. Because all tracks are made up of pure digital information, there is no degradation of sound quality through track "mixing". The only limitation you face, is that only **16** different MIDI channels exist to separate your output information.

Also Remember: When mixing, you must have a data disk in your disk drive. Once mixed, tracks <u>cannot</u> be un-mixed, so you should make sure to <u>save tracks to disk before mixing!</u>

Exiting the Edit Page

When you are satisfied with all the editing you have performed, press the Space bar to return to the Main Page. If you accidently press the space bar before you are ready to leave the Edit Page press Ξ to return to the Edit Page. Note: You must have your program disk in drive number one to exit the Edit Page.

The Utilities Page

You enter the **Utilities Page** from the Main Page by pressing the $\mathbb U$ key. The Utilities Page is where you set up certain system parameters for synchronization and system control.

UTILITIES PAGE

1. DRUM TIMEBASE	24
2. START/STOP	INT
3. MASTER CLOCK	INT
4. PUNCH IN TRACK	OFF
5. AFTERTOUCH	ON
6. LOOP TRACKS	OFF

PRESS SPACE TO EXIT

Drum Timebase

The **Drum Timebase** utility is to be used when working with non-MIDI drum machines connected to your Passport MIDI Interface by its DRUM-Sync connector (this control has no effect on MIDI drum machines connected via MIDI). By pressing 1 you toggle the Drum Timebase utility to send either **24** or **48** clocks per quarter note.

Please Note: Non-MIDI drum machines will <u>not</u> stay in sync with your sequence when you use Fast Foward or Rewind.

Start/Stop

The **Start/Stop** utility is normally set to **INT** (internal). With this setting Master Tracks can start and stop, record or playback only by the pressing of your computer's space bar. You should also set Start/Stop to INTernal when using a MIDI or TAPE Master Clock (see below)

Pressing 2 in the Utilities Page, will toggle Start/Stop to EXT (external). This allows you to start Master Tracks from an external audio source connected to the "Cassette In" jack of your Apple II. This is useful when you have no tracks left on your tape recorder for the sync track. The external audio source can be used to "Jump Start" playback.

Master Clock

Pressing \$\mathbb{S}\$ in the Utilities Page, will toggle the master clock source between INT (internal), MIDI (external) and TAPE.

The master clock utility is also normally set to INT (internal). With this setting Master Tracks generates its own internal clock, and ignores any clock information received over MIDI.

Master Clock cont.

When the master clock is set to **MIDI**, Master Tracks will receive and synchronize to MIDI clocks generated by an <u>external</u> MIDI source connected to MIDI IN on the Passport MIDI Interface (i.e. MIDI drum machines, sequencers and external tape sync boxes). You should leave the Start/Stop set to <u>INT</u>ernal for proper operation.

When the master clock is set to TAPE, Master Tracks can be synced to its own

previously recorded tape-sync signal on tape (See Advanced Techniques).

Punch in Track

Pressing 4 in the Utilities Page will let you set up a track to Punch In on during playback. Select the track to Punch In on by first pressing 4 and then the track number 1 - 8 you wish to work on.

Please Note: You can only Punch In on a track <u>once</u> per play in the Main Page. Should you wish to redo the Punch In, or Punch In to another spot on the track, you must reset the Punch In Track on the Utilities Page.

Aftertouch

Looping Tracks

The **Loop tracks** utility allows you to have all recorded tracks in a sequence repeat continually without reaching an end. Pressing 6 while in the Utilities Page will toggle track looping **ON** or **OFF**. When in the **ON** position each track of your sequence will "loop" back to it's begining upon reaching the point at which you <u>ended</u> the track. Each track will loop **independently** of all other tracks. For example, track 1 may repeat every two measures, at the same time that track 2 is repeating every ten measures.

Exiting the Utilities Page

When you are satisfied with all the changes you have made, press the Space bar to return to the Main Page. If you accidently press the space bar before you are ready to leave the Utilities Page press $\, \mathbb{U} \,$ to return to the Utilities Page.

Quikstep Editor Step Time

Tutorial

Pressing @ from the Main Page will take you to Quikstep, the step-entry and editing section of Master Tracks. You must have your program disk in drive #1 in order to enter Quikstep. You can use Quikstep to create a track from scratch, or to convert and edit a "real-time" recording from Master Tracks' main sequencer section. Quikstep will automatically save and load the last Step File you were working on.

Upon entering Quikstep you will find yourself on the Quikstep Main page. You will be presented with this list of options:

QUIKSTEP MAIN PAGE

C CONVERTER
D DISK STORAGE
E STEP EDITOR

U UTILITES

SELECT BY LETTER
PRESS SPACE TO EXIT

Pressing $\[\mathbb{E} \]$ from the Quikstep main page will take you to the heart of Quikstep, the Step Editor.

STEP EDITOR

Input Line -> [] [] START [] []

Don't be intimidated by all of the numbers and symbols located in the top portion of this screen; their meanings will be explained in detail in the **Step Editor** section below. Do not worry either about the specific time or parmameter values on your screen, as they may differ from the above example.

On the bottom line you will find a flashing square. This cursor indicates that the program is ready to accept step input.

Step 1: On your synthesizer keyboard play middle "C". While you are holding the note, look at the monitor screen. The "start" message should move up one line and below it will appear:

C 5

Step 2: Continue to hold middle "C" key, and play a few more notes; for this example press the next "E" and "G" above it. Now add the next highest "C". The line below Start should now read:

C5 E5 G5 C6

If you played any black keys, they will be displayed as inverse letters. The abbreviation **FLA** appearing on the right side of the parameter line (upper screen section) tells you that all inverse letters represent flats. For example an inverse "D" is a "D" flat.

The numbers that have appeared after the note names are the **octave** numbers. Octave 0 is the lowest MIDI octave, and Middle "C" is C 5.

Step 3: Release all notes. Some numbers will be added to the right side of the screen, and the chord notation will move up the screen one line. It will look similar to this:

C5 D5 E5 G5 C6......24 100 75

The first of the new numbers, is the chord's "time value". This value is expressed in MIDI clocks (24 per quarter note). The above example is a quarter note (24). The possible range is from 1 to 240 clocks.

The next number is the "velocity number". Its valid range is from 1 to 127.

The last number represents the chord's "articulation", the musical quality of being "legato" or "staccato", (long or short). Here it is expressed as a percentage, "75" meaning that the note will actually sound for 75 percent of the note's 24 clocks. (18 clocks). For the last 25% (6 clocks) it will be silent. Eight different articulation values are provided.

Step 4: Set the time values of your next event, either note or rest, by pressing one of your computer's number keys (1 thru 0). Notice that these numbers are displayed at the top of your monitor screen.

When you press a number key, the time value directly below the selected number will "light-up" in inverse letters. This is the new assigned time value. You may select a new time value at any time, and also increase or decrease it by pressing the right or left arrow keys.

- Step 5: Repeat steps 1 through 4 several times to create a series of events. Play anything you want. Press the require key occasionally to enter rests at the assigned time value. When you are ready to hear your piece, move on to the next step.
- Step 6: Press Control A to return to the beginning of your file. You will find the Start line at the bottom of your screen once more.
- Step 7: Press \$pace to play back your file. As the sequence plays, your file will scroll up the screen. Pressing \$pace again will stop playback and freeze scrolling. Pressing the space bar will resume playback from your current location in the file.
- Step 8: Hold down Control and press 2 on Apple //e's (for Apple II+ press Control Shift P). You will now find yourself on the Quikstep page.

QUIKSTEP MAIN PAGE

C CONVERTER
D DISK COMMANDS
E STEP EDITOR

U UTILITES

SELECT BY LETTER
PRESS SPACE TO EXIT

Step 9: Select © to enter the Converter (this will take a couple of seconds).

CONVERTER PAGE

- 1. STEP FILE -> TRACK
- 2. TRACK -> STEP FILE

SELECT BY NUMBER PRESS SPACE TO EXIT

Step 10: At this point press 1. You are going to convert your Step File to a Track for playback in the Main Sequencer. Select a track number (1 - 8) to convert your Step File to. You will be presented with some transposition and channel assignments which may be changed at another place in the program (Utilites). For now press \forall for "yes". The conversion will take a couple of seconds for a very large file, and much less for a small one. When the file has been converted, your computer will "beep" once.

Step 11: Press Space to return to the Quikstep page.

Step 12: Press Space once more to move to the Master Tracks main sequencer.

Step 13: You may now play back the track you selected to convert to just as you would play back a real time track.

You have just created your first Step File with Quikstep. Please read over the following pages to learn more about Quikstep and its powerful step entry and editing features.

Step Editor

Pressing E from the Quikstep page will take you to the heart of Quikstep, the Step Editor.

Step Editor

Input Line -> [] [] START [] []

Selecting Time values

The numbers on the top of your screen represent your computer's number keys (1 thru 0). Any time value (represented on the line below these numbers) in a range of 1 to 240 may be assigned to these keys. The selected time value is highlighted, and may be increased or decreased by using the left and right arrow keys. This scheme lets you have a total of ten different time values available for use at the "press of a number key". See Appendix 3 for a list of default time values.

Entering notes and rests

Note values are entered on the Input Line from your synthesizer keyboard connected to MIDI IN on the Passport MIDI Interface. When a key is depressed and held down, the program will treat all other key presses as simultaneous events, until either maximum notes (as set in the Utilites Page) is reached, or until the keyboard is free of all key depressions. These notes will be listed on one line as a single "event" or "step" in your sequence file.

Rests are entered on the Input Line by pressing the Return key.

Entering Phrase Markers

You may enter an "phase" marker at any point in your file, by pressing the $\it I$ key. These markers can provide your Step File with "landmarks" to indicate segment end points (such as measures). Phrase Markers can be used to let you move quickly through your file.

Moving around the Step File

The bottom portion of the Page is used to list the steps in your Step File. Note names are displayed with normal letters representing natural notes, and inverse letters representing flats or sharps. The numbers after the note names represent the octave, starting at octave 0 for key # 0. Note: Middle C is C5.

The file is always displayed during editing, 17 lines at a time. You always input, edit and delete events on the **bottom line** of the screen. The key commands for scrolling the file are as follows:

CONTROL - J Move forward 1 event (Down Arrow)

CONTROL - K Move backward 1 event (Up Arrow)

CONTROL - W Move forward to the next phrase marker

CONTROL - Q Move backward to previous phrase marker

CONTROL - A Go to the start of the file

CONTROL - Z Go to the end of the file

In all of the above commands, you must hold down the CONTROL key while pressing the specific letter key to complete the command.

Space - Play from current position or stop play back.

Editing your file

Quikstep provides several commands for use in editing your files. Most of these commands involve copying events to or from a "Buffer". Quikstep maintains a Buffer that can hold up to 1000 notes. Events copied into the Buffer are kept there until you Erase the Buffer - even when you go to or from the sequencer or shut down! Therefore it is a good practice to clear (erase) the contents of both the Step File and the Buffer before starting a new Quikstep file to make sure that data from previous tracks do not remain in memory.

CONTROL - D

Delete the last event into the buffer. The deleted event is kept in the "Buffer" which will enable you to perform other edit functions.

CONTROL - C

Copy the last event into the buffer without changing the original event in the Step File. This command will copy the last entered event in its entirety into the buffer.

CONTROL - R

Return last event from buffer to Step File. Use this in combination with the CONTROL - D command to move a single event or group of events.

CONTROL - B

Copy an image of the entire "Buffer" into the Step File. This command in combination with CONTROL - D and CONTROL - C will enable you to move entire sections of your file, or repeatedly copy a section of your file.

CONTROL - E

Erase. This command will display an erase menu which provides you with the following options:

- Erase steps from the current position to the start of your file.
- Erase from the current position to the **end** of your file.

CONTROL - A Erase entire Step File (ALL) except the Buffer.
CONTROL - B Erase "Buffer".

Pressing any other key will **cancel erase** and move you back to the Edit Page.

Step Editor

Number Keys ->	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(0)	
	4	-									<- Time Values
Parameters ->	CT#	CTV	PRE	AFT	PWL	***	ACC	ART	TMP	FLA	
	49	56	48	56	-15		12	75	100		<-Parm Values
Header Line ->	MEM=	36588		VEL=	127	001.1	1. 00	T	٧	Α	
	=====	====		=====	====	====		=====	=====	====	

Entering Parameters

The third line from the top of your screen is the Parameter line. With Quikstep you can enter MIDI parameters such as aftertouch, preset changes and MIDI controllers into the Step file using the game paddles and buttons. The line below the parameter line displays the data values for each parameter. (A complete list of all MIDI parameters is available in the MIDI SPEC 1.0 available from the International MIDI Association).

Paddle #1 is always used to select the current velocity value which is displayed on the header line. Button #1 (or the "Open Apple" key on a IIe) will change the velocity of the last event (if a note) to the selected value.

Paddle #2 is used to change the different parameter values and is assigned to a parameter by pressing seaps and then the corresponding number key. Button #2 (or the "Closed Apple" key on a IIe) will enter the parameter value selected by Paddle #2 into the Step File.

CT# (Controller Number)

Pressing SCIPS 1 will let you choose a specific MIDI controller by number. A list of MIDI controllers and their functions should be contained in your synthesizer's manual or you can get a listing of all assigned controllers in the MIDI SPEC 1.0 available from the International MIDI Association (a partial listing of controller numbers can be found in Appendix 4). In order to enter controller values into your Step File you must first select a controller number with CT#. You can then select the yalue for that controller using CTV below.

CTV (Controller Value)

Pressing \$302p\$ 2 will allow you to select the <u>value</u> for the controller selected in CT# above. Controller information is selected using paddls #2 and is entered into the step file using paddle button #2 (*Closed Apple* key).

PRE (Preset sound)

Pressing Scaps 3 will let you set the synthesizer preset (program) number you wish to use in your Step File. The preset number is selected usng paddle #2 and is entered into the step file using paddle button #2 ("Closed Apple").

AFT (Monophonic aftertouch)

Pressing escape 4 will let you use paddle #2 to select the amount of Aftertouch to store in the step file. Aftertouch information is entered into the step file using paddle button #2 ("Closed Apple" key).

PWL (Pitchwheel amount)

Pressing *** will let you use paddle #2 to adjust the amount of pitch bend to store in the step file. Pitch Bend information is entered into the step file using paddle button #2 ("Closed Apple" key). To pitchbend a note you must insert Pitch Wheel Amounts between tied notes. Don't forget to return pitchbend amount to "0" to restore proper pitch to your file.

ACC (Accent)

Accent allows you to increase or decrease the velocity value of the current event (if a note) by a fixed amount. Accent amount is adjustable by typing @@@app 7 to highlight ACC then using paddle #2 to set the amount. Pressing the < key acts as a negative accent and pressing the > key acts as a positive accent.

ART (Articulation)

TMP (Playback Tempo)

Your sequence's **playback tempo** can be adjusted by pressing **@SGETPO 9**. Tempo can be varied during playback and using **paddlo #2**.

Tempo changes can be stored in a file by setting the value using paddle #2, then entering it into the file by pressing button #2 ("Glosed Apple" key). Upon playback the tempo will always change to the entered value, regardless of the original tempo. The tempo range is 25 - 200 beats per minute.

FLA/ SHP (Flats or Sharps)

Pressing SCape 0 will allow you to toggle the way black keys are displayed in the step file between either sharps (SHP) or flats (FLA). If set to FLA, an inverse "D" will represent a D flat. The same note displayed as C sharp would be displayed as an inverse "C" when set to SHP.

Step Editor

Number Keys ->	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(0)	
	4	6	12	18	24	36	48	72	96	144	<- Time Values
Parameters ->	CT#	CTV	PRE	AFT	PWI	***	ACC	ART	TMP	FLA	
	49	56	48	56	-15		12	75	100		<-Parm Values
Header Line ->	MEM=	36588		VEL=	127	001.	1. 00	T	V	Α	
	=====				====			=====		====	

Header Line

MEM (Memory)

The number listed after **MEM** gives you a current reading of memory available for recording your Step File in bytes.

VEL (Velocity)

You can choose the velocity of each entry by using paddle #1. Six scales of velocity resolution are available giving 127, 64, 32, 16, 8 or 4 different values. Velocity scale is determined by the Velocity Scale on the Configuration page. Velocity range is from 1 to 127. Velocity may be modified with paddle #1 and button #1 ("Open Apple") during playback.

Clock

The number to the right of your velocity setting shows you where you are in the Step File in terms of clocks. This is the same clock that is used on the Main Sequencer Page. The current location at the point of insertion on the bottom line is displayed in measures, followed by number of beats (<u>set by the BEAT value in the main sequencer</u>), followed by the number of MIDI clocks.

nnn .	n	nn
(Measure number)	(Beat)	(MIDI Clocks)
001-999	1-9	00-23

T (Time duration value)

The time durations of your entered events will appear in this column .

V (Velocity value)

The velocity value of each entered event will appear in this column.

A (Articulation value)

The articulation value assigned to each entered event will appear in this column.

Exiting the Step Editor

You exit the Step Editor by pressing control 2 on an Apple IIe, or control - shift - P on an Apple II+. After exiting the Step Editor you will return to the Quikstep page.

Converter - Converting Between Step and Track Files

Pressing @ from the Quikstep page will take you to the Converter Page. The Converter Page is used to convert <u>Step Files</u> from Quikstep, to <u>Tracks</u> for use in the main sequencer. It can also be used to convert live <u>Tracks</u> to <u>Step Files</u>, for step editing in Quikstep or for storage on disk as a Step File.

CONVERTER PAGE

- 1. STEP FILE -> TRACK
- 2. TRACK -> STEP FILE

SELECT BY NUMBER PRESS SPACE TO EXIT

The Converter Page is where you will choose to convert a recording from a Step File to a Track (by pressing 1) or from a Track to a Step File (by pressing 2).

Before converting, the MIDI channel and transpose offset used in the conversion will be displayed and you will be prompted to confirm the choice. If you wish to change either the MIDI Channel or Transpose offset used by the Converter, you must do so on the Quikstep Utilites page.

The Converter Page is the link between Quikstep and the main sequencer. You can use it to capture a live Track in Quikstep for editing, or for saving the Track to disk as a Step File. This technique can be used to save individual tracks for later use in other compositions.

Pressing the space bar will take you back to the Quikstep main page.

Disk Commands

Pressing D from the the Quikstep page will take you to the Quikstep disk page. This page is where you can save or load Step Files or Setup Files for use within Quikstep. This page will also let you save and load single tracks when used in conjunction with the Convert page and the Main Sequencer.

QUIKSTEP DISK PAGE

C CATALOG

L LOAD QUIKSTEP FILE

S SAVE QUIKSTEP FILE

D DELETE QUIKSTEP FILE

R READ SETUP FILE

W WRITE CURRENT SETUP

SELECT BY LETTER PRESS SPACE BAR TO EXIT

To select any of the disk options type the appropriate letter.

<u>Disk access in Quikstep will occur on whichever drive was selected as the data drive on the Master Tracks Main Sequencer disk page.</u>

A STEP FILE is the Quikstep file that you create in the Step Editor or convert from a Track to a Step File. You can use Step Files to store individual Tracks for later use. Saving your Step Files will allow you to build up a library of individual parts, such as bass lines, rhythm parts or chord progressions that you can use in future compositions. To LOAD, SAVE or DELETE a Step File press the appropriate letter.

A SETUP FILE is a set of operating parameters for Quikstep. These parameters are displayed both on the top of your Step Editor screen and on the Quikstep Utilites page. You may save different Setup Files containing different sets of time, controller or configuration data for use when working in certain meters or with particular equipment. To READ(load) or WRITE (save) a Setup File press the appropriate letter.

Press Space to return to the Quikstep page.

QUIKSTEP UTILITES

Pressing $\, \mathbb{U} \,$ from the Quikstep page will take you to the UTILITES page.

UTILITES PAGE

1. PLAY CHANNEL	1
2. RCV TRANSPOSE	+0
3. PLAY TRANSPOSE	+0
4. VELOC. SCALE	0
5. MAX. NOTES	10
6 DRUM CLOCKS	24

SELECT BY NUMBER PRESS SPACE TO EXIT

Play Channel

Pressing 1 from the Utilites page, allows you to choose which MIDI channel (1 thru 16) your Step file will play back on. This selected MIDI channel will also be used when converting a Step File to a track. Use the right and left arrow keys to select the MIDI channel and and then press any other key to enter it.

RVC Transpose

Pressing 2 from the Utilites page allows you to transpose the pitch of incoming notes from your synthesizer keyboard up or down anywhere within a 2 octave range (+ / - 24 1/2 steps). This feature therefore provides you with a means of recording input notes beyond the keyboard's normal range.

To select a transpose value for incoming data from your MIDI keyboard, use the right and left arrow keys to raise or lower the pitch and then press any other key to enter it.

Play Transpose

Pressing \$ from the Utilites page allows you to transpose the pitch of your Step File during playback to your synthesizer up or down anywhere within a 2 octave range ($\div - 24$). You may also use this feature to transpose when converting a step file to a track.

To select a value for transposing a Step File during playback or when converting to a track, use the right and left arrow keys to raise or lower the pitch and then press any other key to enter it.

Velocity Scale

Pressing 4 from the Utilites page allows you to select one of six different velocity scales for **paddle #1** for use in the Step Editor. This allows you to utilize 127, 64, 32, 15, 8 or 4 discrete velocity values. This scale will effect how many different velocity values **paddle #1** will recognize, making it easier for you to control velocity in different situations. All scales have the same range from 15 to 127.

To select a velocity scale, use the right and left arrow keys and then press any other key to enter it.

The six velocity scales are:

(0) = 127 values	(3) = 16 values
(1) = 64 values	(4) = 8 values
(2) = 32 values	(5) = 4 values

Maximum Notes

Pressing 5 from the Utilites page allows you to determine how many notes may be entered on a line in the Step Editor. You may choose 1 to 10 notes per line. For example, setting "maximum notes" to 1 makes entering monophonic lines very fast.

To select the number of maximum notes per line, use the right and left arrow keys and then press any other key to enter it.

Drum Clocks

Pressing ® from the Utilites page, will toggle between 24 and 48 clocks per quarter note(for non-MIDI Drum machines only). This is a concern when clocking non-MIDI drum machines through the DRUM output of your Passport MIDI Interface.

Exiting Quikstep

When you are finished with Quikstep, press the Space bar from the Quikstep page to return to Master Tracks' Main Page. You must have your program disk in drive number one in order to leave Quikstep. If you accidentally press the space bar before you are ready to leave, press @ from the main sequencer to return to Quikstep.

PLEASE NOTE: Quikstep will automatically save the Step File and Setup file you are working on to the program disk <u>each</u> time you exit. This includes any changes you may have made to the Step File header information <u>and</u> the Utilites Page. If you experience any problems such as files being transposed or data not playing back on the right channel etc., please check to see if you have made any changes to the Utilites Page.

Song Mode

Tutorial

Step 1: Record two short multi-track sequences in the Main Sequencer and <u>save</u> the Sequence files on your data disk. Name the files "FILE 1" and "FILE 2".

Step 2: Press \$\seconds from Master Track's Main Page to get to the Song Mode. After a few seconds you will see the following:

1 REBUILD LAST SONG 2 START WITH NEW SONG

PRESS SPACE TO RETURN TO SEQUENCER

Step 3: Press 2 to Start with a New Song. You will now enter the Song page. If you are working with a single drive system, replace your Master Tracks program disk with the data disk that you stored "FILE "1 and "FILE 2" on in step 1.

MASTER TRACKS - SONG MODE SONG PAGE (C) 1985 PASSPORT DESIGN

SEQ	FILENAME	SIZE
1	0	
2	J	
3		
4		
5		
6		
7		
8		
9		
10		
11		
12		
		MEM: 36728

CTRL COMMANDS / LOAD SONG / SAVE SONG DELETE SONG / CATALOG / NEW SONG / QUIT ESC - PLAYBACK PAGE Step 4: You will see a cursor under the FILENAME column. Type the name of the first Master Tracks sequence ("FILE 1") that you saved in step 1 followed by require. The program will load in your first sequence.

Step 5: The cursor will automatically move down to the next line. Type the name of the second Master Tracks sequence ("FILE 2") that you saved in step 1 followed by require. The program will load in your second sequence.

Step 6 : Press @s@ap@ to go to the playback page.

MASTER TRACKS - SONG MODE PLAYBACK PAGE (C) 1985 PASSPORT DESIGNS, INC.

SEQ	REP	VC	TMP	TR	MEM	0			
>									
İ									į
į									İ
									-
									-
									i
С			BE RACKS			4 5	6	DRUM=24 7 8	4

CTRL COMMANDS: INSERT / DELETE
ESC - FOR SONG PAGE
PRESS SPACE TO START AND STOP PLAYBACK

Step 7 : You will see a flashing cursor under the SEQ column. Type the number 1 to select sequence #1 for this step. Press the ⋄ key three times to move under the TMP column.

- Step 8: Type a tempo of 100 for this step's tempo and press the down arrow key to move down to the next step (press control J on an Apple II+).
- Step 9: Type the number 2 to select sequence #2 for this step. Press the ⇒ key three times to move under the TMP column.
- Step 10: Type a tempo of 140 for this step and press the down arrow key to move down to the next step (press control J on an Apple II+).
- Step 11: Type the number 1 again to select sequence #1 for this step. Press the >> key four times to move under the TR column.
- Step 12: Type a \diamond then the number 12 to select the transpose offset for this step and press the down arrow key to move down to the next step (press control J on an Apple II+).
 - Step 13: Press control A to go to the beginning of the step list.
- Step 14: Press space to hear your song play back. You will hear your first sequence play back at a tempo of 100, then your second sequence play back at a tempo of 140, then your first sequence play back again at its original tempo, only this time it will be transposed up an octave.
- Step 15: When your song stops playing, press @@@@p@ to return to the song page.
- Step 16: Press control S to save your song. At the prompt type the name of your first song ("SONG 1") followed by return. The program will save the song on your data disk.

You have just composed your first song using Master Tracks' Song Mode. Please read over the following pages to learn more about the Song Mode and how to utilize this powerful compositional tool.

Song Page

You get to the Song Mode from Master Track's **Main Page** by pressing S. NOTE: This will <u>erase</u> any sequence you were working on in the Main Sequencer - you should save your sequence if you wish to keep it before entering the Song Mode.

On your way to the Song Mode you will see the following screen:

1 REBUILD LAST SONG.
2 START WITH NEW SONG.

PRESS SPACE TO RETURN TO SEQUENCER

Pressing 1 will automatically rebuild the last song you were editing and put you in the Song Mode (see Building a Song below). Pressing 2 will create a new (blank) song and put you in the Song Mode. Pressing 5 will return you to Master Track's Main Page without erasing your tracks in memory. After answering the prompt with 1 or 2 you will find yourself on the song page.

MASTER TRACKS - SONG MODE SONG PAGE (C) 1985 PASSPORT DESIGNS

S	EQ	FILENAME	SIZE
1 2 3 4 5 6 7 8 9 10 11	INTRODUCTIO VERSE ONE VERSE TWO CHORUS SOLO / VERSE ENDING		1200 4213 6804 2116 5761 1278
			MEM: 21245

CTRL COMMANDS / LOAD SONG / SAVE SONG DELETE SONG / CATALOG / NEW SONG / QUIT ESC - PLAYBACK PAGE

The Song Mode lets you create songs for play back consisting of Master Tracks sequences linked together. Your sequences will play back in the Song Mode just as they do on the Main Page, or you can select various options on the playback page that can modify the way your sequences play back. Song Mode economizes on memory usage by allowing multiple repetitions of sequences.

Moving Around The Song Page

The song page is where you load in the sequences from the disk that you will use in your song. The song page is also where you save and load whole songs. If you selected a new song on your way into the Song Mode, you will see a blank song page with the cursor positioned next to SEQ #1 underneath the FILENAME column.

In order to move around on the song page, you must have some sequences loaded in. Otherwise the cursor will sit on the top line. You can only move around between the sequences loaded on this page.

Up arrow - Move up to the next sequence. (Press control K on an Apple II+). The screen will scroll if necessary to show up to 255 sequences.

Down arrow - Move down to the next sequence. (control J on a II+).

CONTROL - A Move to the first sequence at the top of the song page.

CONTROL - Z Move to the last sequence at the bottom of the song page.

SEQ

The **SEQ** number is the <u>sequence number</u> assigned to a sequence file when you load it in. You will use a sequence number to refer to a particular sequence for each step in the playback page. Up to 255 sequences can be loaded (assuming that they will all fit in memory).

FILENAME

The Filename column is where you type the name of the sequence that you wish to load. To **load** a sequence, simply type its name (you do not have to type the suffix ".M8"). You can load sequences from different diskettes by swapping them in the data disk drive specified in the Master Tracks Disk Page.

You can remove a sequence from the song page by positioning the cursor on the filename to be removed and typing FeVerm. The program will prompt you "Remove this sequence from song ? Y/N:" Answer $\mathbb Y$ to remove the sequence or $\mathbb N$ to keep it. When the program removes a sequence from the song page, its filename will be replaced with:

* EMPTY

This will let you know that you removed a sequence and that it is no longer present in the song. (See SEQ in playback page).

SIZE

When a sequence is loaded, the program will first check to see if there is enough memory left to load the file. If so, it will load the file and display its size in bytes under the SIZE column.

MEM

Displayed at the bottom right of the sequence list is the total amount of available memory you have left in the Song Mode in bytes.

Songs, Song Files and Workfiles

A <u>Song</u> consists of all the sequence names on the song page, the actual MIDI data for each sequence and the parameters displayed on the playback page which are stored in memory at any given time in the song mode.

A <u>Song File</u> consists of a disk file containing all of the sequences names on the song page, the actual MIDI data for each sequence, and the parameters displayed on the playback page. Song Files tend to be large and can take many seconds to load and save.

A <u>Workfile</u> in the song mode, consists of <u>only</u> the sequence names on the song page and the parameters displayed on the playback page. The actual MIDI data for each sequence is not stored in the workfile. You can automatically rebuild the last song you were working on when you enter the song mode from the workfile. In order to do this, you must save the workfile when you exit the song mode.

Using a Workfile instead of a complete Song File can save you time when moving between the song mode and other sections of the program. A Workfile will also let you edit and modify individual sequences contained within a song without having to keep trackof which version of the sequence is actually stored in the Song File on disk. You can save a final Song File when you have completed the song and are ready to move on to a new composition.

Building A Song

You can begin building a song by selecting a NEW SONG and typing in the filenames for each sequence you wish to use in that song. If you wish to use a sequence several times in a song in several different places, you only have to load it in once. You complete building a song by filling in the parameters on the playback page. Note: a SONG is not complete until the parameters on the playback page have been filled in.

The **program** can automatically rebuild the last song you were working on whenever you enter the Song Mode and press 1 to REBUILD A SONG. This feature is very useful when you need to repeatedly edit individual sequences that are part of a whole song.

Building a song cont.

The program will load in a workfile with data and filenames from the last song you were working on and then attempt to rebuild your song from that information.

If the program cannot find a sequence on the disk or encounters another error, you will see a message similar to the following:

FILE NOT FOUND RETRY / SKIP / ABORT : ?

RETRY - Pressing $\mathbb R$ will tell the program to try and load your sequence in again. You can swap your data disks prior to pressing R in order to get the right diskette in the disk drive.

SKIP - Pressing S will tell the program to **skip** this sequence and continue on to the next or return you to the song page. Do this if you have a bad file or I/O Error and wish to continue building the song anyway.

ABORT - Pressing ${\mathbb A}$ will tell the program to ${\bf stop}$ the loading process and return you to the song page.

Note: whenever the program rebuilds a song for you, it does not update any "Song" files that you have saved on the disk. Whenever you have a finished song, save the "Song File" on the disk again to make sure that any changes you made to the individual sequence files or header are saved in the "Song File".

Disk Commands

Songs are stored on the disk with the ".SM" suffix. You do not have to type the ".SM" suffix when loading, saving or deleting a song.

LOAD SONG - To load a song from the disk type control L from the song page and then type the name of the song to load at the prompt followed by return.

SAVE SONG - To save a song from the disk type @on@roll \$\sigma\) from the song page and then type the name of the song to save at the prompt followed by redurm.

DELETE SONG - To delete a song from the disk type control D from the song page and then type the name of the song to delete at the prompt followed by reduirs.

Disk Commands cont.

 ${\bf CATALOG}$ - To ${\bf Catalog}$ the data disk and list the files, type control ${\mathbb G}$ from the song page.

NEW SONG - To clear all of song memory and start over with a **NEW** (blank) song, type $\mathfrak{Sontrol}$ $\mathbb N$ from the song page and answer the prompt with $\mathbb Y$ to clear memory and set up a new song or $\mathbb N$ to keep memory and your current song intact.

Exiting Commands

QUIT

Press control @ from the song page to QUIT the Song Mode and return to Master Tracks' Main Page.

Before exiting the Song Mode, the program will prompt you to save the current Workfile. Answer \mathbb{Y} to save your Workfile and type its name at the prompt. This way you can automatically re-build your song the next time you enter the Song Mode from the Workfile information. Answer \mathbb{N} to leave the Song Mode without saving your latest work. (The last Workfile you saved will still be on the disk.)

ESCAPE

Press @S@@p@ to go to the playback page in the Song Mode.

Playback Page

After deciding upon a set of sequences to be used in your song, press @S@1p9 from the song page and go to the **playback page**. The playback page is where you will connect the sequences together to form a song.

MASTER TRACKS - SONG MODE PLAYBACK PAGE (C) 1985 PASSPORT DESIGNS, INC.

SEQ	REP	vc	TMP	TR	MEMO
1	001	N	120	+00	Intro
2	002	Υ	120	+00	Ist Verse
3	002	N	120	+05	2nd Verse
4	001	N	140	+00	Chorus
2	002	Υ	120	+00	Ist Verse
5	002	Υ	120	+05	3rd Verse
4	001	Ν	140	+00	Chorus
6	006	Υ	120	+00	Ending

CLOCK= INT	BEATS	=4					DF	RUM=24
ACTIVE TI	RACKS: 1	2	3	4	5	6	7	8

CTRL COMMANDS: INSERT / DELETE
ESC - FOR SONG PAGE
PRESS SPACE TO START AND STOP PLAYBACK

Moving Around The Playback Page

The playback page is where you enter the steps that define which sequences are played in what order. You can have an unlimited number of steps in your song as long as they will all fit in memory.

In order to move around on the playback page, you must have some steps displayed. Otherwise the cursor will sit on the top line. You can only move around between the steps entered on this page.

Up arrow - Move up to the next step. (Press control $\mathbb K$ on an Apple II+). The screen will scroll when you have a lot of steps entered.

Down arrow - Move down to the next step. (Press control ${\mathbb J}$ on an Apple ${\mathbb H}_+$).

Moving cont.

- •> Move cursor to the right. As on the Format Page, moving to the right will also let you access the parameters at the bottom of the step list (Clock, Beats, Drum and Active Tracks).
- Move cursor to the left. As on the Format Page, moving to the left will also let you access the parameters at the bottom of the step list.
 - control A Move cursor to the beginning of the file (first step).
 - control \mathbb{Z} Move cursor to the end of the file (last step).

SEQ

The column on the far left of the step display is the **Sequence** column. This is where you type the number of the sequence that you wish to play in this **step**. Type the sequence **number** that you wish to play in this step and press **PRUTE** or an **arrow** key. The program will only let you type a Sequence number that is **loaded** on the song page.

When a sequence is removed form the song page, a "*" will appear next to any step in the playback page that references that sequence by number. This will let you know that the sequence for the particular step is no longer in memory. When the song plays back, steps with a "*" next to the SEQ number will be skipped.

REP

The REP column displays the number of times that this step will repeat. The repeat range is 0 -255. A repeat value of 0 will tell the program to skip this step during playback. A repeat value of 1 will tell the program to play this step once. To select a repeat value, position the cursor using the right and left arrow keys and type a number from 0 to 255 and press return or an arrow keys.

REP determines the repeat count for the longest track of a given sequence. When a sequence plays back as a step in the Song Mode, the individual tracks may or may not loop depending on the setting of the LOOP parameter in the Utilities Page for that sequence.

IMPORTANT! When using looping sequences in the song mode be sure that each track divides evenly into the longest track. Since the song mode will advance to the next step whenever the longest track has finished its repeat count, any other tracks still playing in the sequence will be cut short and the program will advance to the next step. This may cause some notes on the looping tracks to "hang" because these tracks do not divide evenly into the longest track. The cure for this is to only use looping tracks in the song mode that divide evenly in time into the longest track of a given sequence.

VC

The VC column lets you select whether or not preset (program) numbers are sent out at the beginning of each step. This feature is useful for controlling how your synthesizer will sound in a song. For example, if one step ends with notes playing a sound with a long decay or release, you may not want the next step to send preset changes as an unwanted "popping" sound could occur.

Preset changes are set up under the PRE column on the Format Page for each sequence. To <u>send</u> preset changes at the beginning of a step, position the cursor using the right and left arrow keys and type Y under the VC column and press return or an arrow key. To <u>not send</u> preset changes at the beginning of a step, type N under the VC column and press return or an arrow key. Typing a N for VC in a step is the same as having all of the preset values on the Format Page set to 0.

TMP

TMP lets you select the starting Tempo for the step. To select a starting Tempo value for a step, position the cursor using the right and left arrow keys and type a number from 25 - 200 and press return or an arrow key. Each step can play back at a different tempo.

TR

TR lets you select a transpose offset for the step. To select a transpose offset for a step, position the cursor using the right and left arrow keys and type either + (for up) or - (for down) followed by the number of half steps you wish to transpose by (0 to 24). Numbers entered without a + or - will be assumed to be a "+" and will be transposed up.

MEMO

The **Memo** field is provided to let you type comments about the step, similar to the "Instrument" column in the Format Page. To type a Memo, position the cursor using the right and left arrow keys under the **Memo** column for the step and type your comment. Press return to enter the memo.

CLOCK

Positioning the cursor using the right and left arrow keys and typing return will toggle the CLOCK source between INT (Internal), MIDI (External) and TAPE. This is the same master clock source used on the Utilities Page.

The master clock is normally set to INT (Internal). With this setting the Song Mode generates its own internal clock, and ignores any clock information received over MIDI. This is the mode to use when writing a Sync tone to tape from the Song Mode (See Advanced Techniques).

When the master clock is set to **MIDI**, the Song Mode will receive and synchronize to MIDI clocks generated by an <u>external</u> MIDI source connected to MIDI IN on the Passport MIDI Interface (i.e. MIDI drum machines, sequencers and sync boxes).

When the master clock is set to **TAPE**, the Song Mode can be synced to its own previously recorded tape-sync signal on tape (See Advanced Techniques).

BEATS (Beats per Measure)

Beats are used to set the metronome to "count in" a measure before playback begins. To set beats per measure, point to **BEATS** using the right and left arrow keys and type a number between 0 and 9 and press return or an arrow key to set your count in value.

DRUM

Positioning the cursor using the right and left arrow keys and typing return will toggle the DRUM timebase to send either 24 or 48 clocks per quarter note. This parameter is used when working with non-MIDI drum machines connected to your Passport MIDI Interface by its DRUM-sync connector (this control has no effect on MIDI drum machines connected via MIDI).

ACTIVE TRACKS

ACTIVE TRACKS select the tracks (1-8) that will play back in each sequence for each step in the Song Mode. You can use ACTIVE TRACKS to mix down individual "song tracks" to a multi-track tape recorder when syncing to tape (See Advanced Techniques). ACTIVE TRACKS functions identical to "PLAY" and "OFF" in the Format Page.

To select which tracks will be Active for each sequence in the song, position the cursor using the right and left arrow keys to point at ACTIVE TRACKS and type the number (1 - 8) of each track you wish to change.

When a track number is **inverted** it is set to PLAY. Typing each track number will toggle the track between PLAY and OFF. When you have finished setting up which TRACKS to be ACTIVE, press require or an arrow key.

INSERT

Pressing @ontrol I or TAB will let you INSERT a blank step immediately above the step you are pointing to. You must assign a sequence number to this new step before moving on, or the INSERT will be ignored.

DELETE

Pressing control D will let you DELETE the step you are pointing to.

SPACE

Pressing space will start and stop playback of your song from the current cursor position. To playback from the beginning, press control A then space. Note: You must have steps assigned to valid sequence numbers present in song memory in order to play back in the Song Mode.

Playback Commands

During playback the following commands can be executed:

Tempo Change

Use the -> and <- keys to increase or decrease the tempo during playback. This can also be used when writing a sync track to introduce minor changes in tempo (see Advanced Techniques).

Note: The tempo will be "reset" at the beginning of each step to the **TMP** value specified for the step.

Exiting the Playback Page

Press @@@@@@ to leave the playback page and return to the song page.

Please Note: You can only exit the Song Mode from the Song page.

Exiting the Song Mode

QUIT

When you are ready to leave the Song Mode, press CONTROL and @ from the Song Page to return to Master Tracks' Main Page. You must have your program disk in drive number one in order to leave the Song Mode.

Before exiting the Song Mode the program will prompt you to save the current workfile. It is a good idea to save the workfile if you have changed anything since entering the Song Mode. Answer $\, \mathbb{Y} \,$ to save the workfile and type its name at the prompt. Answer $\, \mathbb{N} \,$ to leave the Song Mode without saving the workfile.

If you accidently QUIT the Song Mode and wish to come back, press $\$ to return to the Song Mode.

Getting Things Done The Basics

This section will give you step by step instructions for working with Master Tracks. You should by now be familiar with your computer, as well as the fundamentals and lay-out of Master Tracks. If you find yourself uncomfortable with the terms, or program sections referred to in this part, then you should read over Part I and review the various sections of this program before you proceed.

Recording and Playback

Real Time Recording

Step 11

Recording a track (Real Time)

Step 1	Boot your Master Tracks Disk. Once booted, The Format Cursor will be pointing at track #1.
Step 2	Press R to switch track into REC (record).
Step 3	Move the Format Cursor using the → key to BEATS and type in a number (1 thru), to give yourself a metronome count and set the clock timing for the recording (i.e. 4 for 4/4 time 3 for 3/4 time)
Step 4	Press the space bar to exit the Format Page. You will see the Main Page menu displayed below the Track Display.
	USED: 00016 CLOCK: 001.1.00 LEFT: 36591 DISK / EDIT / FORMAT UTILITIES / QUIKSTEP / SONG PRESS SPACE BAR TO RECORD OR PLAY
Step 5	Press the space bar again to start recording. The program will automatically count off the number of Beats you set in step 3.
Step 6	Play something simple on your keyboard like a bass line or chord progression.
Step 7	Press the space bar to stop recording(on the nearest full beat). You will automatically return to the Format Page.
Step 8	Position the Format Cursor using the right and left arrow they sunder the FUNC column for track # 1 and press P to set the track in PLA (play).
Step 9	Press the space bar to exit Format Page.
Step 10	Press the space bar to begin playback. You should hear your track playback on your keyboard. You can change the sound on

your keyboard using your synthesizer's control panel.
You can stop and restart playback by pressing the Space key

playback and return to the Format Page.

once to stop and twice again to start. When ready to move on, stop

Recording a second track (Real Time)

Step 1	From the Format Page press ESC or the up and down
	arrow keys to switch the format cursor to point at track # 2.
	Use the «- and -> keys to position the cursor under the FUNC
	column on track # 2.
Step 2	Press R to switch track #2 to REC (record). The previous track
	will automatically switch to PLA (play).
Step 3	Press the space bar to exit the Format Page.
Step 4	Press the space bar to begin recording.
Step 5	Play your keyboard to overdub a new part. You should hear your first part play back while you are recording the second part.
Step 6	Press the space bar to end recording.
Step 7	Repeat steps 1 - 6 to record another track if you wish.

Mixing Tracks (same channels)

Step 1

	and "recording a second track", and making sure to assign the same MIDI channel to both tracks.
Step 2	From the Main Page press E to enter the Edit Page.
Step 3	Press M to mix tracks.
Step 4	Type in the number of your source track.
Step 5	Press return
Step 6	Type in the number of your destination track (the track you want to mix to).
Step 7	Press return.

Follow the procedure above for "recording a track"

Mixing Tracks (different channels)

Step 1	Follow the procedure above for "recording a track" and "recording a second track", making sure to assign a different MIDI channel to each track.	
Step 2	From the Main Page press E to enter the Edit Page.	
Step 3	Press M to mix tracks.	
Step 4	Type in the number of your source track.	
Step 5	Press return	
Step 6	Type in the number of your destination track (the track you want to mix to).	
Step 7	Press return.	

Linking Tracks - Repeating or adding a section to a track (copy track)

Step	1	Follow the procedure for "recording a track" to record the segment you wish to repeat.
Step	2	Make sure you have at least one blank track available.
Step	3	From the Main Page, press E to enter the Edit Page.
Step	4	From the Edit Page, press L to link.
Step	5	Type in the number of the track containing your short segment as your source track.
Step	6	Press return
Step	7	Type in the number of a blank track as your destination track.
Step	8	Press return
Step	9	Repeat steps 4 thru 8 for each time you wish the segment to repeat.

Looping Tracks - Playing it over and over again

Step 1	From the Main Page, press U to enter the Utilities Page.	
Step 2	From the Utilities Page press 6 to turn loop tracks to	
	ON.	
Step 3	Press the space bar to return to the Main Page.	
Step 4	Press the space bar once more to begin playback.	

Channelizing Data - Playing music on more than one keyboard

Step 1	From the Format Page choose a track that is already recorded and move the format cursor to point to the CH column.	
Step 2	Choose which keyboard you wish to have play the information recorded on that track and remember its MIDI channel.	
Step 3	Select the MIDI channel (1 thru 16) and type in the number.	
Step 4	Repeat steps 1 through 3 for each track, and keyboard that you wish to have play each track.	
Step 5	Press Space and Space again to hear the tracks.	

Saving and Loading Sequences

Saving Sequence Files

It is a very good idea to save your work periodically while recording, both as a whole, or in its pieces (prior to mixing, linking or autocorrecting).

Step 1 From the Main Page, press D to enter the Disk Page.

Step 2 Press S to save file.

Step 3 Type in it's name and press Return. You should not type

".M8" at the end of the filename.

Loading Sequence Files

Step 1 From the Main Page press D to enter the Disk Page

Step 2 Press L for load.

Step 3 Type the name of the piece you wish to retrieve from

the disk (be careful to spell the name exactly as it appears in the catalog, and do not include the file type

i.e. ".M8")

Step 4 Press Return.

Changing Information and Playback

Solo - Listening to only one track during playback.

Step 1 From the Main Page press the Space bar to begin playback.

Step 2 Hold down the Shift key. (II+ owners see Appendix 2)

Step 3 Press the number 1 - 8 of the track you wish to hear in

solo.

Step 4 Press ® to un-solo the track.

Mute - Turning off some tracks during playback

Step 1 From the Main Page press the Space bar to begin playback.

Step 2 Press the number 1 - 8 of the track you wish to mute. (II+ owners

see Appendix 2)

Step 3 Press the same number 1 - 8 to un-mute the track or press

10 to un-mute all tracks.

<u>Transposing</u> - Playing back your music in a new key

Step 1	From the Format Page press the -> or <- key until the format cursor points at TRANS.	
Step 2		
Step 2	Type either a + to raise the key or a - to lower the key.	
Step 3	Type in the number of half steps you wish to transpose by (1 - 24).	
Step 4	Press Return.	
Step 5	Press space to hear the transposed sequence.	

Changing Tempi - Changing the speed of your music during playback

Step 1	From the Main Page press the space bar to begin	
	playback.	
Step 2	Press the -> key to increase the music's tempo.	
Step 3	Press the ≪ key to decrease the music's tempo.	

Autocorrecting Tracks

Step 1	From the Main Page press E to enter the Edit Page.	
Step 2	After entering the Edit Page, press A to Autocorrect.	
Step 3	Type in the number of the track (1 - 8) you wish to correct, or hold down the CONTROL key and press A for all.	
Step 4	Choose the duration value you want to correct your track to and press its corresponding number.	
Step 5	Press return	

Please note: It is best to Autocorrect to a short note duration if you are not sure of your choice. You cannot un-correct a sequence, but you can re-correct to a longer note duration. It is a good idea to either save the whole sequence on disk prior to autocorrecting, or link the track to be corrected to an empty track to save a copy of it prior to autocorrecting.

Working with Drum Machines (//c owners please refer to Appendix 2)

Drum Method one: Sending aClock Code to your MIDI drum machine (Using your computer as the master clock)

Step 2 Set Utility 3 to read as follows:

UTILITIES PAGE

1.	DRUM TIMEBASE	24
2.	START / STOP	INT
3.	MASTER CLOCK	INT
4.	PUNCH IN TRACK	OFF
5.	AFTERTOUCH	OFF
6.	LOOP TRACKS	OFF

PRESS SPACE TO EXIT

Step 3 Make sure that your drum machine is set up to receive External MIDI clocks, and External MIDI start/stop.

Drum Method two: Clocking Master Tracks <u>from</u> your MIDI drum machine (Using your MIDI drum machine as the master clock)

Step 1 From the Main Page, press ⋓ to enter the Utilities Page.

Step 2 Set utility 3 to read as below:

UTILITIES PAGE

1.	DRUM TIMEBASE	24
2.	START / STOP	INT
3.	MASTER CLOCK	MIDI
4.	PUNCH IN TRACK	OFF
5.	AFTERTOUCH	OFF
6.	LOOP TRACKS	OFF

PRESS SPACE TO EXIT

Step 3	Make sure that your drum machine is set up to send MIDI clocks, and send MIDI start stop.	
Step 4	Press space to return to the Main Page, set track(s) to Play.	
Step 5	Press space, then start your drum machine to begin playback. The Sequence or Song will now follow any tempo information set by the drum machine	

The Basics 5/6

Working with Drum Machines cont.

Drum Method three: Sending a Clock to a non-MIDI drum machine.

(Using your computer as the master clock)

Step 1 Consult your Passport MIDI Interface manual for correct hook up of your drum machine to the **DRUM** connector on your Interface.

Step 2 From the Main Page, press $\ensuremath{\mathbb{U}}$ to enter the Utilities Page.

Step 3 Set utility 3 to read as follows:

UTILITIES PAGE

1.	DRUM TIMEBASE	24 (or 48)
2.	START / STOP	INT
3.	MASTER CLOCK	INT
4.	PUNCH IN TRACK	OFF
5.	AFTERTOUCH	OFF
6.	LOOP TRACKS	OFF

PRESS SPACE TO EXIT

Step 4 Make sure that your drum machine is set up to receive external clocks.

PLEASE NOTE:

Apple //c owners should consult Appendix 2 and the MIDI PRO INTERFACE Users' manual for more information about working with non-MIDI drum machines.

Master Classes Advanced Techniques

Creating a track one note at a time (single step entry)

Step 1	Press @ from the Main Page, to enter Quikstep.
Step 2	Press E to enter the Step Editor.
Step 3	Choose the time value for each entry by selecting a number key.
Step 4	If first entry is a note or chord , press the appropriate key or keys on your synthesizer keyboard.
Step 5	If entry is a rest press Roturn.
Step 6	Repeat steps 3 through 5 for each entry.

Correcting mistakes in a track (punch in/out)

Real-time correction:

Step 1	Press U from the Main Page to enter the
	Utilities Page.

UTILITIES PAGE

1.	DRUM TIMEBASE	24
2.	START / STOP	INT
3.	MASTER CLOCK	INT
4.	PUNCH IN TRACK	OFF
5.	AFTERTOUCH	OFF
6.	LOOP TRACKS	OFF

PRESS SPACE TO EXIT

Step 2	Press 4 to assign the Punch In track.
Step 3	Type in the number of the track you wish to Punch In to.
Step 4	Press the space bar to return to the Main Page.
Step 5	Press the space bar once again to begin playback.
Step 6	Press মিঞ্জোন্স at the point you wish to Punch In and begin recording.
Step 7	Play the corrected part on your keyboard.
Step 8	Press Return to Punch Out and end recording.

Step-time correction:

Step 1	Follow steps 1 through 5 as listed in "Real-time correction" above.
Step 2	Press ESC to pause sequence before the point you wish to Punch In at.
Step 3	Press the key to advance your sequence one clock at a time until you reach the exact point that you wish to Punch In at.
Step 4	Press Return to Punch In and begin recording.
Step 5	Press the → key to add rests (one clock at a time)to your sequence or hold the new notes down on your synthesizer keyboard and press the → key to advance the clock.
Step 6	Remember to hold the keys you wish to hear down while advancing the clock to set the duration of the notes. Remember also to release the keys and advance the clock to set the duration of any rests you want recorded.
Step 7	Press Return once again to Punch Out and end recording.

Correcting mistakes in a track - Step Editing using Quikstep.

Step 1	Enter Quikstep from the Main Page by pressing @ and
	Convert the track to be edited into a Step File. Select the
	Step Editor by pressing E from the Quikstep page.
Step 2	Use the up and down arrow keys (on an Apple II+
	Control-K and Control-J) to position the mistake at
	the bottom entry position on the Step Edit screen.
Step 3	Press Control-D to delete the event.
Step 4	Follow Steps 3 through 5 in "Creating a track one note at a
	time" above to enter the corrected event.

Biending (mixing) real-time and step-time tracks

Step 1	Follow the procedure in Main Tutorial for "recording a track" and in Quikstep Tutorial for "recording a track one step at a time".
Step 2	From the Main Page press E to enter the Edit Page.
Step 3	Press M to mix tracks.
Step 4	Type in the number of your "real-time" source track.
Step 5	Press roturn.
Step 6	Type in the number of your "step-time" destination track (the track you want to mix to).
Step 7	Press return.

Alternating real-time and step-time tracks

Step 1	Follow the proceedure in Main tutorial for "recording a track" and in Quikstep Tutorial for "recording a track one step at a time".
Step 2	From the Main Page press E to enter the Edit Page.
Step 3	From the Edit Page, press
Step 4	Type in the number of the track containing either your step-time track or real- time track as your source track.
Step 5	Press return.
Step 6	Type in the number of the track not chosen in Step 4 as your destination track.
Step 7	Press return.
Step 8	Repeat steps 1 through 7 for each time you wish the segment to repeat.

Adding more to the end of a track

Method 1 - (Punch In)

Step 1	Press U from the Main Page to enter the Utilities Page.
Step 2	Press 4 to set the track you wish to add to as your Punch In track.
Step 3	Press space to return to the Main Page.
Step 4	Press space to begin playback.
Step 5	Press return just prior to the end of your recorded track to Punch In.
Step 6	Play the additional part on your synthesizer keyboard.
Step 7	Press return to Punch Out and space to end recording.

Method 2 - (Quikstep)

Enter Quikstep from the main page by pressing @ and
Convert the track that you wish to add to into a Step
File. Select the Step Editor by pressing E from the
Quikstep page.
Use Control-Z to move to the end of your Step
file.
Enter your additions following the steps for creating
a step-file.
Convert the step file back to a main sequencer track.

Method 3 - (Mixing)

Step 1	Follow the Main Tutorial for recording a second part.
Step 2	Do not record anything on the second track until you hear your first track end. When you reach your first
	track's end begin playing the additional part.
Step 3	Press space to end recording.
Step 4	Follow the procedure for Mixing two tracks.

Method 4 - (Linking)

Step 1	From the Format Page turn your original track Off
Step 2	Place a second track in record.
Step 3	Play the additional part to be added on your synthesizer keyboard.
Step 4	Follow the procedure for linking two tracks using your second track as the source track and your first as the destination.

Delaying a track - Adding a rest to the beginning of a track

Method 1 (Linking)

Step 1	Record a track in the Main Page that has only a short rest
	recorded in the track (start and stop the recorder quickly).
Step 2	Link the track you wish to delay to the track with the short
	rest in the beginning that you just recorded.
Step 3	Play back the resulting track to hear the delay.

Method 2 (Quikstep)

Step 1	Press @ from the Main Page to enter Quikstep.
Step 2	Convert the track to be delayed into a Step file.
Step 3	Press the space bar to exit the convert page and return
	to the Quikstep page.
Step 4	Press E to enter the Step Editor.
Step 5	Select a time value for your delay by pressing a number key.
Step 6	Press Return. This will enter a rest at the begining of the track you have just converted to a Quikstep file.
Step 7	Press control 2 to exit the Step Editor (control - shift - P on a Apple II+) and return to the Quikstep page.
Step 8	Convert the step file you have just edited back to a track.
Step 9	Return to the Main Page to play back your track.

Transposing a single track

Method 1 (Quikstep)

Step 1	Follow the Main Tutorial for "recording a track".
Step 2	Press @ to enter Quikstep mode.
Step 3	Press © to from the Quikstep page to enter the converter page.
Step 4	Select 2 to convert your track to a Step file.
Step 5	Press space to return to the Quikstep page.
Step 6	Select U to enter the Utilites page.
Step 7	Select \$\mathbb{3}\$ from the Utilites page for play transposition.
Step 8	Type in the number of half steps you wish to transpose by.
Step 9	Press space to return to the Quikstep page.
Step 10	Press © to from the Quikstep page to enter the converter page.
Step 11	Select 1 to convert your Quikstep file to a track.
Step 12	Press space to return to the Quikstep page.
Step 13	Press apage to return to the main sequencer. The track you converted to will contain the transposed MIDI data.

Please remember to reset the play transposition in the Quikstep Utilites back to the original setting.

Method 2: (Main sequencer)

Step 1	Follow the Main Tutorial for "recording a track".
	Remember the last clock value reached for this track.
Step 2	Set the track FUNC to Play.
Step 3	Move the format cursor to TRNS, and type in the
	number of half steps you wish to transpose by.
Step 4	Connect a MIDI cable from the MIDI Out of your
	Passport MIDI Interface to the MIDI In on your
	Interface.
Step 5	Place a second track in Record.
Step 6	Press space to begin recording your second
	track.
Step 7	When the clock reaches the value you remembered in step 1, press space to end recording.
Step 8	Return your MIDI cables to their original hook-ups. The second track will now contain the first track transposed.

Synchronizing to tape or External MIDI clocks (//c owners see Appendix 2)

- From the Main Page press U to enter the Utilities Page. Step 1
- Step 2 Press 3 and set Master Clock to either MIDI or TAPE depending upon which you are using for a clock source. (Leave Start/Stop set to INT.) If you are recording a Song you can set the CLOCK to MIDI or TAPE on the Song Mode Playback Page.
- Step 3 Master Tracks will now be synchronized to the clock source you selected. Set Master Tracks to Playback by pressing the Space key from the Main Page or from the Playback page in the Song Mode. You must then start up the external source (MIDI Machine or Tape Deck) in order for Master Tracks to start playback in sync.

Recording with a multi-track tape recorder (//c owners see Appendix 2)

- Step 1 Record your tracks on Master Tracks as you would normally. If you are using one keyboard, and wish to end up with a multi-timbred arrangement on tape, take care to keep each track's MIDI information on a different MIDI channel.
- Step 2 Connect the tape sync output on your Passport MIDI Interface to the line-in of an outside track on your tape deck. Connect the line-out of the same track on your tape deck to the tape sync input on your Interface. (Consult your Interface manual for these connections.) Master Tracks is always writing a sync leader tone when on the Main Page and Song Mode Playback Page prior to playback.
- Step 3 Place your tape deck in record and start the tape rolling. Let a few moments of tape roll by to record the sync leader tone.
- Step 4 Press the space bar at the spot where you wish to begin playback of your sequence / song. Master Tracks will write a tape sync signal to the tape while the piece plays back. If you monitor the sync tone, you will hear it drop in pitch on the down beat.
- Step 5 When your sequence / song has ended playback, rewind your tape deck and prepare it for playback of track #1.

Multi-track tape recording cont.

Step 6	From the Main Page press $ \mathbb{U} $ to enter the Utilities Page. (If you are recording a song you do not need to go to the Utilities Page.)
Step 7	Press \$ and set Master Clock to TAPE . If you are recording a Song you can set the CLOCK to TAPE (or MIDI) on the Playback Page.
Step 8	Press the Space bar to return to the Main Page. Be sure that the track you want recorded on tape is set to PLAY on the Format Page and all other tracks are OFF. Be sure that your keyboard is set to receive on that track's MIDI channel. (If you are recording a song you can set ACTIVE TRACKS to playback one track at a time on the Playback Page.)
Step 9	Press the Space bar again for sequencer start. Your sequencer will wait until it receives the sync signal from tape to begin playback.
Step 10	Set your tape deck to play the tape sync track.
Step 11	Set your tape deck to record your first keyboard part on an open track. (Not the tape sync track!)
Step 12	Start your tape deck. Master Tracks will begin playback when it reaches the sync signal.
Step 13	Repeat Steps 8 through 12 for each track you wish to record.

MASTERTRACKS for the APPLE II+

Notices/Changes to Manual

Hardware Requirements (Main manual - 1/1)

You should have at least 64K RAM of memory in your Apple II+ computer. If you are not sure what your particular computer has please consult your local Apple dealer.

MAIN SEQUENCER (Main manual - 2/11)

Please ignore any references to the Up and Down arrow keys.

SOLO

Due to differences between the //e and II+ keyboard layouts the following keys should be used to SOLO a track:

Solo Track #	II+ key	Solo Track #	II+ key
1	[SHIFT] 1	5	[SHIFT] 5
2	[SHIFT] P	6	[SHIFT] N
3	[SHIFT] 3	7	[SHIFT] 6
4	[SHIFT] 4	8	[SHIFT] *

QUIKSTEP (Main manual - 3/4)

IMPORTANT! - A joystick or game controller <u>must</u> be installed in the game port of the Apple II+ for proper operation of the Quikstep Step Editor functions.

MASTERTRACKS for the APPLE //c

Program Enhancements / Changes to Manual

MAIN SEQUENCER

a.) Common Track Functions (Main manual - 2/8)

TEMPO now has a valid range of 25 to 250 beats per minute for all Master Tracks modes - Main Sequencer, Quikstep and the Song Mode.

b.) The UTILITIES PAGE (Main manual - 2/21) has been changed to read as follows:

1. TIMING MODE	INTERNAL
2. DRUM OUT	ON
3. DRUM TIMEBASE	24
4. SEND START/STOP	ON
5. SEND MIDI CLOCK	ON
6. AFTERTOUCH	OFF
7. PUNCH IN TRACK	OFF
8. LOOP TRACKS	OFF

- TIMING MODE defaults to "INTERNAL" but can be set to accept sync from non-MIDI drum machines ("DRUM IN"); accept sync from a MIDI timing source ("MIDI IN"); accept a sync signal from tape ("READ TAPE"); and send a sync signal to tape ("WRITE TAPE)"
- 2. DRUM OUT toggles ON/OFF sending the non-MIDI drum clock via the Drum Out.
- 4. <u>SEND START/STOP</u> toggles ON/OFF the sending of MIDI start, stop, or continue
- 5.SEND MIDI CLOCK toggles ON/OFF the sending MIDI timing information.
- 3, 6, 7, 8 all function the same as the IIe version refer to main manual section 2

Advanced Techniques

Recording with a multi-track Tape Recorder (TAPE SYNC)(Main manual-6/6)

TAPE SYNC in the Sequence Mode

- Make sure the interface is properly connected to the tape deck (for best results use one of the outer most tracks on the tape for the sync signal and, if possible, avoid using the track adjacent to the sync tone- If you must use that track, record it last)
- 2. Set the longest track of your sequence or song to "PLA".
- 3. From the UTILITIES screen set TIMING MODE to "WRITE TAPE".
- Return to the main screen, and press the [SPACEBAR] ONCE the message "WRITING START TONE" "PRESS [SPACE] TO START RUN TONE" "PRESS [ESC] TO EXIT" should be seen.
- 5. Put the channel that tape sync is connected to in record then start the tape rolling .

MASTERTRACKS for the APPLE //c

Program Enhancements / Changes to Manual

TAPE SYNC in the Sequence Mode cont.

- 6. After at least one second of recording the "start" tone (the longer the better) press the SPACE bar again to start the "run" tone. Record <u>ONLY</u> the sync track for best results do NOT record any music on the tape during this first pass. Each music track from the sequencer MUST be recorded while reading the tape sync tone to ensure exact syncronization to the other tracks.
- 7. Allow your piece to play through to the end, making any desired tempo changes. (It is helpfull to make the sync tone track <u>longer</u> than your piece by recording a few extra bars of silence at the end of one of your tracks on the software).
- 8. After recording, return to the UTILITIES and set TIMING MODE to "READ TAPE".
- On the tape deck set the channel you have the sync track on to play and set another track to record your first music track from the sequencer.
- 10. Rewind the tape to a point slightly before or during the Start tone, return to the Main menu and set the track(s) of the sequence you wish to record first on tape to "PLA".
- 11. Start the sequencer (press the spacebar)- you will see the prompt "START TAPE". Then start the tape the song will then play in sync when the run tone is detected.
- 12. Repeat steps 8 thru 11 for each subsequent track(s) you wish to record.

TAPE SYNC in the Song Mode

- 1. Make sure the interface is properly connected to the tape deck (see note above).
- 2. From the Song Mode Playback Page set the CLOCK to "WRITE TAPE".
- 3. Press the [SPACEBAR] ONCE the message "WRITING START TONE" "PRESS [SPACE] TO START RUN TONE" "PRESS [ESC] TO EXIT" should be seen.
- 4. Put the channel that tape sync is connected to in record then start the tape rolling .
- 5. After at least one second of recording the "start" tone (the longer the better) press the SPACE bar again to start the "run" tone. Record <u>ONLY</u> the sync track for best results do NOT record any music on the tape during this first pass. Each music track from the song MUST be recorded while reading the sync tone to ensure exact syncronization to the other tracks on to tape.
- 6. Allow your piece to play through to the end, making any desired tempo changes.
- 7. After recording the tone, set the CLOCK to "READ TAPE".
- 8. On the tape deck set the channel you have the sync track on to play and set another track to record your first music track from the sequencer.
- 9. Rewind the tape to a point slightly before or during the Start tone.
- 10. Start the sequencer by pressing the spacebar- you should see the prompt "START TAPE" Then start the tape the song will then play in sync when the run tone is detected.
- 11. Repeat steps 8 thru 10 for each subsequent track(s) you wish to record.

Quikstep

Note Duration values

The following table lists the default note and rest values (in BOLD type) and some of the more common note values you can use in the Quikstep Step editor.

Since all standard MIDI timing information is based on 24 clocks per quarter note, this table is based on that value.

DURATION NUMBER	NOTE VALUE
2	Thirty-second note triplet
3	Thirty-second note
4	Sixteenth note triplet
6	Sixteenth note
8	Eighth note triplet
9	dotted Sixteenth note
12	Eighth note
16	Quarter note triplet
18	dotted Eighth note
24	Quarter note
36	dotted Quarter note
48	Half note
72	dotted Half note
96	Whole note
144	dotted Whole note

Quikstep

Controller Numbers

The following partial listing contains some of the confirmed MIDI controller numbers you can enter into a Quikstep Step file. Since some of the following information has just been established, please note that not all synthesizers will conform to this listing. Specific information regarding MIDI controller numbers and valid controller values should be listed in your synthesizer owners' manual and could also be found in the IMA MIDI 1.0 Spec.

Controller numbers 0 thru 63 are continuous controllers with a valid range of 0 thru 127, while #'s 64 thru 121 are defined as continuous switches with most having a value of 0 for OFF and 127 for ON.

All other controller numbers are either undefined or in the process of being defined - please contact the International MIDI Association (818-505-8964) for up to date info.

CONTROLLER #	FUNCTION
1	Modulation Wheel or lever
2	Breath Controller(Yamaha)/VCF Mod.(Korg)
4	Foot Controller
5	Portamento time
6	Data entry
7	Main Volume
32-63	Least Significant Bit for Values 0-31
64	Damper Pedal
65	Portamento
66	Sustenuto
67	Soft Pedal

Please see our newsletter "THE INTERFACE" for updated information regarding the use of MIDI controller numbers.

MAIN SEQUENCER / REAL TIME RECORDING

FORMAT PAGE Commands

- <-- Move cursor to the left; Select parameter to change.
- --> Move cursor to the right; Select parameter to change.

UP Arrow - Move cursor up to select track. DOWN Arrow - Move cursor down.

ESC - Move cursor down to select track.

Track functions: R - RECORD P - PLAY O - OFF

SPACE BAR - Exit format screen, enter Main Page.

MAIN PAGE Commands

D - Disk page E - Edit page F - Format page U - Utilities page Q - Quikstep mode S - Song mode

-> Tempo increase during PLAY

Tempo decrease during PLAY

1 thru 8 - Track mute

ESC -Pause On/Off (see below)

(Shift)1 thru 8 - Track solo.

SPACE BAR - Start/Stop Record/Play track(s)

RETURN - Punch-in RECORD while sequencer is in play (See Utilites to set track #)

ESC (PAUSE) commands:

F - Fast forward

-> - Single step advance

R - Rewind (no audio)

<- - Single step rewind (no audio)

ESC - Resume playback

SPACE BAR - Stop, return to Format Page

RETURN - Step Time Punch-in RECORD (Set track # in Utilities, use -> to advance)

EDIT PAGE Commands

A - Auto-correct chosen tracks

E - Erase chosen track(s)

L - Link(Copy) a track to the end of another track M - Mix a track into another track

SPACE - Exit Edit page, return to Sequencer

UTILITES PAGE Commands

- 1 Toggle 24 and 48 clocks pgn for non-MIDI drum machine sync
- 2 Toggle INTernal / EXTernal sequencer start/stop
- 3 Toggle INTernal, MIDI, and TAPE clock source
- 4 Punch in track use #1 to 8 to select
- 5 Toggle ON / OFF the recording of after-touch
- 6 Toggle ON / OFF independent track looping
- SPACE Exit Utilites page, return to Sequencer

DISK PAGE Commands

- C Catalog the files on data disk drive
- L Load a sequence file from the data disk
- S Save a sequence to the data disk
- D Delete a sequence from the data disk
- R Read(Load) a MIDI 4 or 4+ file
- W Write(Save) Tracks 1-4 as a MIDI 4+ file

[CONTROL] I - Initalize a blank disk

ESC - Toggles between 1 or 2 disk drives

SPACE - Exit Disk page, return to Sequencer

QUIKSTEPIM

MAIN PAGE Commands

- C Enter Converter Page
- D Enter Disk Page
- E Enter Step Editor
- U Enter Utilites Page

SPACE - Exit to Main Sequencer

CONVERT PAGE Commands

- 1 Convert a Step File to a Sequence Track
- 2 Convert a real-time Track to a Step File

SPACE - Exit to Quikstep Main Page

DISK PAGE Commands

- C Catalog files on the data disk
- L Load a Quikstep Step file from the data disk
- S Save a Quikstep Step file to the data disk
- D Delete a Quikstep Step file from the data disk
- R Read (Load) a Quikstep Setup file (header and utilities information) from the data disk. (Read ORG will load the default original setup file)
- W Write (Save) a Quikstep Setup file to the data disk

SPACE - Exit to Quikstep Main Page

UTILITES PAGE Commands

Press number to select, use right and left arrow keys to change 1 to 5

- 1 PLAY CHANNEL(#1 to 16) for Quikstep file use -->, <-- keys to select
- RECIEVE TRANSPOSE (+/- 24 1/2 steps) allows for transposition of incoming MIDI data use -->, <-- keys to raise or lower the pitch of notes coming from your synthesizer (use to input notes beyond the range of your keyboard)
- PLAY TRANSPOSE (+/- 24 1/2 steps) allows for transposition of outgoing MIDI data use -->, <-- keys to raise or lower the pitch of notes going to your synthesizer
- VELOCITY SCALE (#1 to 6) lets you use 6 different sets of velocity values to control the entering of velocity information into the Step file
- MAXIMUM NOTES(#1 to 10) determines how many notes may be entered per line in a Quikstep file
- DRUM CLOCK toggles between 24 and 48 clocks per quarter note for non-MIDI drum machines only.

SPACE - Exit Quikstep Utilites, return to Quikstep Main page.

QUIKSTEP**TM**

STEP EDITOR Commands

Movement commands		
Control - A	Go to start of file.	
Control - Z	Go to end of file.	
Control - Q	Go back to the previous phrase marker.	
Control - W	Go forward to the next Phrase marker.	
Control - J	(or down arrow) go forward 1 event.	
Control - K	(or up arrow) go back 1 event.	
Edit commands		
Control - B	Copy buffer image to the step file.	
Control - C	Copy 1st event into the buffer from the step file.	
Control - D	Delete first event into buffer.	
Control - R	Retrieve last event entered into buffer back into the file.	
Erase command		
Control - E	Enter the erase menu.	
<-	Erase from the begining to current insert point.	
->	Erase from the current insert point to the files end.	
Control - A	Erase entire step file (except the buffer)	
Control - B	Erase the buffer.	
D	d.	
Parameter comr		
0-9	Select duration preset	
->	Increment current duration preset.	
<-	Decrement current duration preset.	
Return	Enter a rest (current selected duration preset)	
/	Enter a phrase marker.	
<	Add accent to the velocity of last entered event.	
>	Subtract accent from the velocity of last entered event.	
ESC-1	Enter MIDI controller #	
ESC-2	Enter MIDI Controller value	
ESC-3	Enter Synthesizer preset number.	
ESC-4	Enter Monophonic aftertouch	
ESC-5	Enter Pitch wheel amount.	
ESC-7	Enter Accent size (1-132)	
ESC-8	Enter Articulation (25,38,50,75,88,99,100,TIE)	
ESC-9	Enter Playback tempo.	
ESC-0	Select Inverse= flats or sharps.	
	Ociect inverse— nats of sharps.	
Paddle commands		
PADDLE #1 Selects velocity (6 scales)		
	PEN APPLE key - Changes events to current velocity setting.	
PADDLE #2	Selects value of current variable parameter.	
	LOSED APPLE key - Enters data (2 thru 5 and 9 only) in Stepfile	

Control - Shift 2 - Exit Step Editor; return to Quikstep Main Page

SONG MODE

Entering Song Mode

- S Enter song mode from Main Sequencer
- 1 Rebuild last Song worked on in Song Mode
- 2 Start with a new Song (assemble a new Song from sequences on disk)

SPACE BAR - Exit Song Mode, return to Main Sequencer

Song Page Commands.

 Load a Song from the data disk. [Control] L [Control] S - Save a Song to the data disk.
[Control] C - Catalog the files on the data disk.
[Control] N - Initalize to a New Song, clear memory of current Song.

[Control] Q - Quit, return to Main Sequencer.

[Control] A - Move to the first sequence in the Song [Control] Z - Move to the last sequence in the Song Down Arrow / [Control] J - Move down to the next Sequence Up Arrow / [Control] K - Move up to the next Sequence

RETURN (when in Filename column) - Delete file(sequence)Y/N? from Song

ESC - Toggle to Playback Page

Playback Page Commands

SEQ - Sequence number - use number keys to enter

REP - Number (0-255) of Repeats for that step - use number keys to enter

VC - Send a Voice(Preset) Change at beginning of step Y/№?

TMP - Tempo of step - use number keys to enter

TR - Transposition (+ or - 24 1/2 steps) of step - use number keys to enter

CLOCK - INTernal/MIDI/TAPE timing source - use return to select

BEATS - Metronome "count in" - use number keys to enter

DRUM - Non-MIDI clock 24/48 ppg - use return to select

ACTIVE TRACKS - Play highlighted Tracks - select with number keys

--> - Move cursor to the right <-- - Move cursor to the left

[Control] A -Move cursor to the first step in the Song [Control] Z -Move cursor to the last step in the Song [Control] I - Insert a sequence at this point in the Song file

[Control] D - Delete this sequence from the Song file

Down Arrow / [Control] J - Move down to the next step in the Sona Up Arrow / [Control] K - Move up to the next step in the Song

ESC - Toggle to Song Page

SPACE - Start and stop playback of Song

NOTES

NOTES



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