### ADDITIONAL INSTRUCTIONS FOR LYRA VERSION 2.3
#### (C) 1986 by Lester Hands

Before you do anything with your Lyra disk, PLEASE MAKE A BACKUP COPY!! Consult the Radio Shack disk operating manual for details. Lyra may be loaded by one of two methods. If typing "DOS" results in an syntax error message, then enter "RUN LYRA".

The first new thing you will notice is the addition of 64th notes and rests at the bottom of the screen. Triplet notes of any note value except a whole note may be entered by placing the correct note on the screen then and pressing the "3" key.

The file load requester has been simplified so that the mouse is used to select the correct filename. Simply move the mouse around until the desired file is selected, then press the mouse button.

An "Append" command has been added to the "FILE" pulldown menu. This command will append a Lyra file from disk on the end of the current music in memory. The channel, velocity, instruments, and tempo assignments remain unchanged by the new music. Only version 2.3 music files may be appended. See below. Be sure the original and appended files use identical voices and have the same time signature.

When you select the "Save as" command on the "FILE" pulldown menu, you may add a disk drive number at the end of the name. This drive number then becomes the default drive. The "Set Drive" command under the "MISC" pulldown menu remains as before.

Under the "EDIT" menu, "Note lengths" has been added. This command allows you to specify the length of each note as a fraction of 8 for each voice. Eight fractions will appear on the screen when you select this item; each fraction corresponds to each voice 1 through 8. Entering 6 for voice 1 will cause notes in voice 1 to be played for 6/8ths of the note value. Entering 0 has the same effect as 8. Please note that this will affect only MIDI play.

The "Block Copy" command has been simplified. Mark the beginning and ending of the block as before, then select "Block Copy". It is not necessary to position the cursor before doing this. The cursor will turn into a vertical "COPY". Now position the cursor at the point you wish the copy to occur and press the mouse button. After copying, the screen will update to the start of music.

Two additional commands are available on the MIDI pulldown menu. The first, "Clock OFF", allows you to turn the MIDI clock on or off. The "ON" or "OFF" displayed refers to the current state of the clock. When on, Lyra will send timing signals at the rate of 24 every quarter note. In addition, start and stop signals are sent at the start and stop of music. If you interrupt playing with the "U" key and then restart, a MIDI continue signal will be sent instead of the start signal. The main use of the clock is for synchronization with drum machines and other synthesizers.

The second command, "MIDI delay", was added to correct performance problems with certain synthesizers. Some synthesizers have had difficulty hearing Lyra. Problems include note sticking and random sounding "garbage". There appear to be two reasons for these problems: either the cable connecting the CoCo serial port to the synthesizer is not supplying the correct current to the synthesizer (see below), or the synthesizer is not fast enough to keep up with Lyra. In most cases, the latter is probably the culprit. So, if you have had problems with your synthesizer, try this command.

MIDI delay allows you to enter a number from 00 to 99. The larger the number, the longer the pause that is inserted between MIDI signals when Lyra is playing music. Experiment with your synthesizer to determine what number works best. Note that as you increase the number and consequently the amount of time

between MIDI signals, the tempo becomes slower and there is greater variation in tempo depending on the number of notes being played simultaneously.

If more than one voice is set to black, the cursor will turn to half tone when in the area of the staff to remind you that no notes may be entered until you change the voice settings to only one black.

There are several limitations in this version of Lyra that you should be aware of. First of all, bar numbers greater than 999 will cycle around to 0 and on. The bar move at the bottom of the screen will function until the size of music causes certain counters to "overflow". This occurs at 1365 quarter notes in voice 1 (or 341 bars of 4/4 time). The time signature can handle up to 5/4 or 9/8 time, but 6/4 or 10/8 or greater will cause an overflow error.

You will find that these limitations for the most part will cause little trouble. Time signatures can be adjusted to smaller values (like changing 12/8 to 6/8). By the time you have exceeded 1365 quarter notes in voice one, you probably will have used up only one third to one half of the available memory. You can still use the full amount of memory by making use of the "Append" command. Break a long piece of music up into smaller chunks (smaller than 1365 quarter notes) and save each part in a different disk file. After you have made sure that each part is correct, then load the first into Lyra, and append each successive part in turn.

Version 2 of Lyra has a slightly different file structure than version 1. When you load a music file into memory, Lyra checks the version and automatically adjusts the music to fit the new version. When you save the music again, it is saved in the new version 2 format. It is highly recommended that you convert all of your present music files to the new format by simply loading the music into Lyra, then saving it back to disk with the "Save" command.

Please delete the instructions in the appendix of the manual for how to make your own MIDI cable. While this cable will work with some synthesizers, it will not work with all because of differences in the input circuitry of the synthesizer. Please order your cable from Speech Systems, specifying what synthesizer and computer you have.

Lyra Convert and the Symphony 12 enhancer have been updated to version 2.0 to reflect the changes in Lyra. You may update your version by sending the original disk along with $7.00 to cover postage and handling to (we must have your warranty registration for this service):

Speech Systems
38 W 255 Deepath Road
Batavia, IL  60510

Speech Systems will no longer offer a free update as a part of the purchase price. However, as enhancements are made, you will have the option to upgrade your version of Lyra for a very reasonable charge.

Yes, Lyra is compatible with the new Color Computer 3. If you are using a monochrome monitor, you can change the display to disable the color signal: press the "M" key as the program is loading, releasing it when the disk drive light goes out.

The complete assembly language source code of Lyra is available for $75.00 to registered Lyra owners. The source code, over 70 pages long, is a treasure trove of programming tricks and techniques.

Continued improvements and enhancements in Lyra are possible only with your support. Current plans include volume and tempo changes, printing music, and a built-in MIDI recorder.

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