ADDENDUM TO THE

MUSIC PRINTING REFERENCE MANUAL:

REVISION D.2

March 1, 1985

The Music Printing User Guide and Reference Manual provide a complete
description of Revision C of Music Print%ng. Since their
publication, however, Music Printing has received some significant
enhancements. This documentation update assumes you are familiar
with the Music Printing Reference Manual.

The differences in Revision D.2 are not major conceptual changes, but
rather expansions of existing ideas. Revision C's Score Menu,for
example, has been restructured into two menus, making possible the
transcription of 32 staves of music at once, instead of the previous
16. A new list of individual edit entries makes it possible to
delete a single entry at any given edit position without affecting
the others. These changes and others are described on the following
pages.

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HARDWARE AND SOFTWARE

Hardware Requirements

To use the Music Printing Option, you need a Synclavier (R) Digital
Music System with at least 60K internal memory and 128K external
memory.

Other hardware required includes:

Disk drives

For Revision D.2, a Winchester disk drive system must be
used.

Terminal

A VT640 high-resolution graphics terminal is required.

Printer

You will need a compatible graphics printer. The software
supports several models. A PRINTER/MODEM port must be
installed on the Synclavier (R) computer.

Click Track Output

Since you will usually use the click track when recording
sequences for transcriptions, you should have the click track
output connected to the sound monitoring system. For
instructions on connecting the click track output, see the
Synclavier (R) Set-up Manual in Binder 1.

The Software

The Music Printing software license is required for use of the Music Printing Option.

The software for the Music Printing Option is packaged on a special diskette labeled Music Printing, Rev D.2. This diskette contains Revision D.2 of Music Printing plus a conversion program that will automatically convert Rev B Music Printing editing into Rev D.2 editing. Thus, Rev D.2 Music Printing can be used to edit sequences previously edited with Rev B as well as with Rev C and Rev D.1 software.

The Music Printing software also includes the Music Printing Symbol Editor, a program that allows you to enter and edit your own graphical symbols for use in Music Printing. A separate manual, Music Printing Symbol Editor, describes this software.

The Music Printing software will be automatically installed on your Winchester disk with the other system software when you use the Winchester Installation program.

Main Menu

Storage Device Selection

You can now designate the storage device from which a
sequence may be recalled and to which it may be stored. The
storage device setting on the Main Menu which appears at the
bottom of the right-hand column can be set to any storage
device attached to your system with the exception of the tape
drive, provided your system software is configured for that
device.

To change the storage device setting, place the cursor over
the current setting and type in the number that corresponds
to the desired device:

ABBREVIATION	TYPE NUMBER	STORAGE DEVICE
SC	1	System catalog
CC	2 or TAB	Current catalog
F0	3	Floppy diskette in MAIN drive
F1	4	Floppy diskette in AUXILIARY drive
R0	5	Floppy diskette in REMOTE drive 0
R1	6	Floppy diskette in REMOTE drive 1
W0	7	Winchester disk drive 0
W1	8	Winchester disk drive 1

Score Menu

Press KP 1 to bring up the Score Menu, as in Rev. C.

The Score Menu of Rev C has been reorganized into two menus, a Score Menu, used for creating the part list and a Part Menu (see below), used to enter the specifics of each part. The following changes on the Score Menu should be noted:

Part Lines

Adding, deleting and moving part lines is accomplished as described on pages 27 through 33 in the Reference Manual, with the following exceptions:

Adding Part Lines

```
+-------------------------------------------------------+
|   Press PF 1 to add a part line.                      |
+-------------------------------------------------------+
```

If no part line has been stored using the KP minus command, then pressing PF1 will insert a part line with default values. The new line will appear above the current line and the current line will move down one line.

When a part line has been stored using the KP minus command, then pressing PF1 will insert that part line with its edit list. As before, the recalled line will appear above the current line and the cursor will move down one line.

Storing a Part Line

```
+-------------------------------------------------------+
|   Press KP minus to store a part line.                |
+-------------------------------------------------------+
```

Pressing the KP minus key duplicates the part line on which the cursor is located and stores it in a temporary buffer. The edit list for the part line will be stored along with all the specifications on the part line. This information will remain in the buffer until you press KP minus again or until you leave the Score Menu.

Specifying Part Names, Score Format and Spacing

On each part line, you may enter the Instrument Name, Score Format, and Vertical Spacing. All of these items may be entered from the Page Menu as well (see below).

Staves per Page

The number of staves to be plotted per page can be changed from this menu, instead of from the Page Menu as in Rev C. (See page 45 of the Reference Manual.)

To set the number of staves per page,

1. press KP 0;

2. type the number of staves per page;

3. press RETURN.

Selecting or Deselecting All Parts for Plotting

You can select or deselect all parts for plotting from this menu.

*   KP7 selects all parts for plotting.

*   KP8 deselects all parts for plotting.

Measure Break Line

The Measure Break Line column now has three positions:

*   Type 1 for "all connected."

*   Type 2 for "all broken except the first line."

*   Press TAB (blank) for "all broken."

Part Menu

After the part list is set up on the Score Menu, move to the Part Menu to specify the individual parts. To do this,

1. place the cursor on the line of the part you wish to specify;

2. press KP period.

The Score Menu will be replaced by the Part Menu with a display of ALL of the transcription parameters for the selected part. Use the cursor keys to move around the menu and set any items you wish. Any item that appears on both the Score Menu and on the Part Menu, such as Instrument Name or Format, may be set on either menu.

Below is the Part Menu with default settings:

Part: 1		Staff	Format	Spacing	Clef	Key
Name: Abbrev: Format: *		Single	#M	26	G	C

Voice	Track	Transpose	Key of Instrument	Resolution
Single	1	0	C	16

Part and Name

These items are described on page 30 of the Reference Manual.

Abbrev:

This item, standing for instrument abbreviation, is a new item. If you specify an abbreviation (of up to 16 letters), it will be printed on every system after the first one, in the same manner as the Instrument Name. (This is handy for large scores.)

Format

The format items are split into two groups on this menu.

● The left-hand box contains the format items which pertain to the left edge of the notation, such as brackets, braces, etc. These may be set on either Score or Part Menu and are described on pages 31 to 33 in the Reference Manual.

● The right-hand box includes the remaining format items: pitch bend, natural sign, accidental format, and syncopation mode. These are described on pages 35 and 36 of the Reference Manual.

Staff

This item replaces the G (Grand Staff) item described on page 34 in the Reference Manual. This is used to split the notes on a track into two parts.

● To transcribe all the notes on the track, press TAB for Single.

● To omit from the notation all the notes below the split point, press 1 for Upper.

● To omit from the notation all the notes at the split point or above, press 2 for Lower.

Spacing

This is the Vertical Spacing item as described on pages 37 and 38 of the Reference Manual.

Clef

This item is the same as described on page 38, except that there are now two additional clefs for percussion parts. Select P (percussion) for a full staff with a percussion clef. Select S (single line) for a single line with a percussion clef.
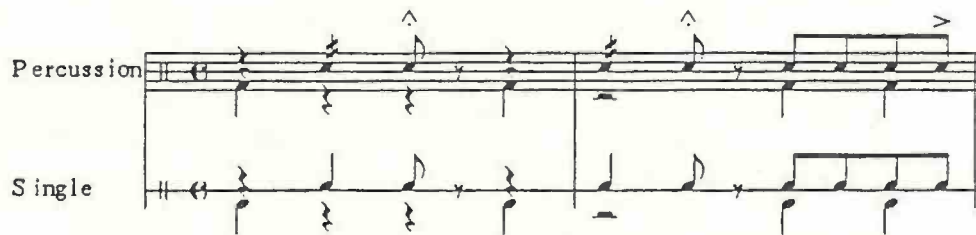
Key

This item is the same as described on page 38.

Voice

This item is used to specify whether the part is to include one or two voices. The effect of this item is described on page 39. However, specifications are entered in a different way. Rather than including both voices on the same line, a separate line is provided for each voice.

● Press PF3 to specify that the part is to have two voices; then two voice lines (Upper and Lower) will appear in the lower box.

● Press PF4 to specify that the part is to have but one voice (Single); then only one voice line will appear.

Once the voice has been specified, the remainder of the voice items (Track, Transpose, Key of Instrument, and Resolution) can be set. The settings are all the same as described on pages 39 to 42 of the Reference Manual.

You may recall any part to the Part Menu directly by leafing through the parts. Press PF1 to proceed up the part list and PF2 to proceed down the part list.

All other menus of Music Printing can be accessed from the Part Menu
by pressing KP 1, KP 2, KP 3, and ENTER, as in previous versions. In
addition, you may press KP period to call up the Part Menu from any
other menu at any time. The system will remember which part you were
on previously.

Page Menu

The Page Menu is the same as described on pages 43-48 of the
Reference Manual except for two changes.

Measure/Line

    When this item is set to OFF, the number of measures per line
    will be determined entirely by the number of notes in each
    measure and the note spacing between those notes.

    If you want to set an upper limit on the number of measures
    that will appear on a line, set the Measures/Line item to any
    positive integer.

    The Measures/Line setting is saved with the sequence.

Staves/Page

    This item is now on the Score Menu.

Keypad Menu

The Keypad Menu can now be used to access a User Symbol Library
created with the new Music Printing Symbol Editor (see the
accompanying manual, "Music Printing Symbol Editor"). The LINEFEED
key is used to toggle between the System Symbol Library (described on
page 49 of the Reference Manual) and the User Symbol Library.

If the User Symbol Library has been selected with the LINEFEED key,
pressing KP3 will bring up six empty banks. You can type in symbol
names from your user library, as explained in "Music Printing Symbol
Editor."

EDITING DISPLAY CHANGES

The Editor now has two modes for information display in the lower section of the screen. The default mode is the Normal Editing Mode; it is the same as described in the Reference Manual. The new mode is the List Display Mode, which is used to display a list of all the edit items in a given edit block.

To enter the List Display Mode from the Editor,

1. press KP period,

2. then press KP 0.

The area below the line will now contain a list of all edit items that have been entered at the edit block on which the cursor is located. If the voice is set to MASTER, then the appropriate edit block for the master edit list will be examined. Otherwise, the edit block in the edit list for the current part will be examined.

The Editor will operate as always, so you may move the cursor to view any edit blocks or add editing.

The Edit Block List will list each item and its type (e.g., TEXT for a string of text and CHAR for a single letter or symbol). Commands will be followed by a U or L for upper or lower voice (this will read L for items from the master edit list) and one or more numbers indicating the value entered (these numbers will sometimes seem obscure; do not worry).

The List Display Mode may be used to delete single edit items or the entire list.

● Press CTRL-C to delete a single item. If there is more than one edit item in the Edit Block List, the text cursor will appear on the first item in the list. Use the cursor arrow keys to place the cursor on the item you wish to delete, then press DELETE. That item will now be deleted, but no others in that edit block will.

● Press CTRL-D to delete all items in the Edit Block list.

To escape this mode without deleting anything, press RETURN.

To return to Normal Editing Mode,

1. press KP period,

2. then press ENTER.

Moving the Cursor

In addition to the methods of moving around the notation explained on pages 56-58 of the Reference Manual, Revision D.2 provides two additional methods of moving the cursor.

CTRL-X

CTRL-X moves the cursor to the nearest "last block" to the right.

CTRL-Z

CTRL-Z moves the cursor to the nearest "last block" to the left.

Selecting the Voice

Selecting the voice, as explained on pages 59-60 of the Reference Manual, has had three major changes:

1. The voice setting now has four positions:

    *   Lower
    *   Upper
    *   Master
    *   Parts

    The effect of selecting Lower, Upper or Master voice is unchanged from previous versions. The new Parts selection will cause editing to be entered into the edit list of each of the parts selected for printing.

2. To move through the voice settings, use only the BACKSPACE key. The LINEFEED key has another function now (see below).

3. If you are using two voices and the notes for those voices are drawn from two separate tracks, then the editor must be set to the correct voice for

    *   the ACCD command;

    *   all sequence commands.

    Since you will be able to move your cursor to notes in either voice, you should check the voicing before entering any of these commands.

    If the notes for both voices are drawn from one track, then the editor must be set to Lower Voice.

Selecting the Symbol Library

There are two separate sets of graphical symbols now.

System symbols are those developed here at N.E.D. and include all graphical symbols from previous version plus the several new ones described below. These symbols are stored in the System Symbol Library.

User symbols are those developed by you using the Music Printing Symbol Editor as described in the accompanying documentation, "Music Printing Symbol Editor." These symbols are stored in the User Symbol Library.

The LINEFEED key is used to toggle between the two libraries. The Bank Display, in the lower section of the Editing Display, will indicate the selected bank and library as in, for example,

    5 Usr

or

    2 Sys

When one symbol library has been selected using the LINEFEED key, the symbols stored in it can be accessed either using the TAB command or through the Keypad Menu. Symbols from the other symbol library are inaccessible until you toggle back to that library using LINEFEED.

Replotting

In addition to the method explained on page 64 of the Reference Manual, Revision D.2 provides two additional methods of replotting from the editor.

CTRL-A

    CTRL-A replots with the current measure as the first measure
    on the line.

CTRL-W

    CTRL-W, followed by a measure number, replots with the
    specified measure as the first measure on the line.

New Symbols

The new symbols are added to the edited score in the same general way as explained on pages 65-66 of the Reference Manual.

TBAR

The TBAR command now has three bar types:

- 0 - standard tuplet bar
- 1 - tuplet bar without legs
- 2 - centered number only

When you enter the TBAR command, you will be asked to

1. specify the bar type (press TAB for 0, or 1 or 2 as indicated above);
2. if Type 0 is selected, enter the direction of the TBAR (using the up or down cursor);
3. specify the tuplet type (as explained in the Reference Manual, pages 68-69).

As in previous versions, you complete the TBAR commmand by moving the cursor to the position of the end of the TBAR and entering the END command.

CHRD

The CHRD (Chord) command is used to create a chord symbol. Place the cursor at the exact point where you want the chord symbol to appear and enter the command CHRD. You will be asked to enter a concert pitch. Enter a letter followed by a sharp symbol (#) or f for flat, if desired.

If the chord is a minor, diminished or augmented chord, add these symbols after the chord symbol.

When a piece with chord symbols is transposed, the chord symbols will be transposed also.

TRIL

The TRIL (Trill) command is used to create a trill symbol. Place the cursor at the exact point where you want the trill symbol to appear and enter the command TRIL.

LTRL

The LTRL (Long Trill) command is used to create a long trill symbol (equal to four TRILs). Place the cursor at the exact point where you want the long trill to appear and enter the command LTRL.

New Transcriptions Commands

The new transcription commands are manipulated in the same way as explained on pages 78-80 of the Reference Manual.

SLEN

> The SLEN (Stem Length) command allows you to specify the length of the note stem in 1/2 space units. A standard quarter note stem is 7 units long.

Cursor position:	Edit block of the note.
Voice:	Voice selection does matter. Select
	o Upper to change stem length in upper voice
	o Lower to change stem length in lower voice

Prompt:	Stem Length.
Response:	Any positive integer from 0 to 255.
Effect:	Lengthens or shortens the note stem.

> NOTE: If you enter this command for a note attached to other notes by a beam, then the stems for all notes connected by the beam will be affected.

ROFF

> The ROFF (Rest Offset) command allows you to offset a rest vertically in 1/2 space units. This is useful for two-voice editing.

Cursor position:	Edit block of the rest.
Voice:	Voice selection does matter. Select
	o Lower to change rest in lower voice.
	o Upper to change rest in upper voice.
Prompt:	Rest Offset.
Response:	Any integer from -63 to 63.
Effect:	Moves the rest up or down by the designated number of half-space units.

NEWL

> The NEWL (New Line) command starts a new line from the measure where the command is entered.

Cursor position:	Any edit block in the measure.
Voice:	Voice selection does not matter. A NEWL command in any track will affect all parts selected for printing.
Effect:	Measure will start a new line.

ENDP

The ENDP (End Page) command ends the page with the line from
which the command is entered.

Cursor position: Any edit block on the line.
Voice: Voice selection does not matter.
                  An ENDP command in any track will
                  affect all parts selected for
                  printing.
Effect: Page will end with this line.

PRODUCING A 32-PART SCORE

At this time, the memory recorder has only 16 tracks. To take advantage of the 32-part feature of Music Printing, you will need to place two parts on some or all of the tracks in the recorder.

This can be done in several ways. You can

- record two parts simultaneously on the same track; or

- record two parts separately, overdubbing the second part onto the same track.

- create two tracks in SCRIPT or from the keyboard and then bounce them onto one track.

However you place the two parts into the memory recorder, you must take care that the parts do not overlap. If need be, record the lower part an octave lower or the higher part an octave higher.

Once all the parts have been created, use the

- Staff item on the Part Menu to split the doubled-up parts into two separate parts;

- SPLT editing command to change the split point between the parts;

- TRANSPOSE item on the Part Menu or the TRAN editing command to move the parts back to the correct octave.