DECK II

MACINTOSH MULTITRACK AUDIO WORKSTATION SOFTWARE

VERSION 2.2

USER'S GUIDE ADDENDUM

Contents

Welcome to DECK II 2.2! This addendum brings your DECK II 2.0 manual up-to-date. OSC has continued to improve DECK II. The release of version 2.2 of DECK II includes the following powerful new features:

- Support of up to 12 tracks on a Power Macintosh with no additional hardware. (12 tracks on a 8100/80, 10 tracks on a 7100 and 8 tracks on a 6100).
- Support of 840 AV (8 tracks) and 660 AV (6 tracks) Macintoshes
- Up to 16-track upgrades available for a single Pro Tools system (requires the OSC 16-Track Tool and a Power Macintosh)
- MIDI file playback from within DECK II
- Virtual Track mixing
- Region Library window for tracking source material
- Enhanced digital video (QuickTime) features, including scrub-on-picture and scrub picture to spot
- Support of QuickTime 2.0
- Support of the WAVE soundfile format
- Enhanced 8-bit audio mixdown (dithering and rounding)

HARDWARE REQUIREMENTS

In order to install and use DECK II, you will need:

1) A Power Macintosh, Macintosh 840AV or 660 AV .

   Or, if you <u>do not</u> have an 840AV or 660AV:

   a) A NuBus or PDS Slot-capable Macintosh running System 7.1 or higher and QuickTime 1.5 or higher.

   AND:

   b) Digidesign's Audiomedia, Audiomedia LC, Audiomedia II, or Sound Tools II or Pro Tools system or RasterOps' MediaTime system or Spectral Innovations' NuMedia system.

2) DECK II requires a Macintosh with 8MB RAM. OSC recommends 12MB RAM or more for those wishing to run DECK II, Metro and OMS concurrently.

3) A hard disk with the following specifications: 12 ms access time (8 tracks); 18ms for 6 tracks; 27ms for 4 tracks and 1.2MB/second SCSI throughput (8 tracks). Drives with hard-wired thermal recalibration routines should be avoided, as they can cause problems on long sustained transfers.

4) For PowerMac and AV users, SCSI Manager 4.3 compatible drivers (which support asynchronous dish I/O) are **highly suggested**.

All other requirements are the same as those listed in your original DECK II user manual.

OSC'S UPDATE AND SUPPORT POLICY

As a DECK II owner, the first action you should take is to **send in your registration card.** You must be a registered owner if you want to receive telephone support, program updates, or new product information.

Once you are a registered owner, program updates will be made available to you free, or for a minimal charge (depending on the nature of the update).

OSC is serious about customer support , and is strongly committed to a continuing relationship with you after your purchase.

Please feel free to contact OSC directly with any questions or problems. A DECK II consultant will be standing by to help you during business hours (Monday to Friday, 8:00AM to 4:00PM PST). For DECK II customer service, call **(617) 969-0754 or FAX (617) 928-0038**. Remember to have your DECK II master disk handy when you call or FAX.

You may also contact us through CompuServe. You will find us in the MIDI Vendors C forum (Type "GO MIDI.")

OSC is made up of people who are very interested in audio, sound design, and the recording process as a whole. Become one of our registered owners and participate in the creative process.

Note: OSC Technical Support can only return telephone calls to customers calling from within the United States and Canada. Customers outside of the US and Canada must contact their respective distributors for technical assistance with OSC products.

8-TRACK TOOL AND 16-TRACK TOOL OWNERS

If you have purchased the 8-Track Tool or 16-Track Tool from OSC for use with your supported hardware (Pro Tools systems), be sure to install it according to instructions. Whenever you read "four active playback tracks" in this manual, remember that you have up to 16 active playback tracks.

INSTALLING YOUR DECK II SOFTWARE

To install the DECK II software on your hard disk:

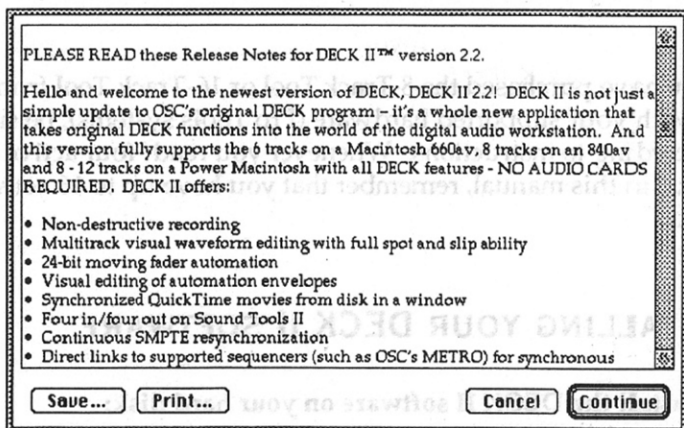1) Restart your Macintosh while holding the Shift key down. This will prevent your System Extensions (INITs) from booting and possibly interfering with the installation process.

2) Put the DECK II diskette into any drive.

   An open diskette window will appear on your Desktop.

3) Double-click on the DECK II Installer application icon. This dialog will appear:

4) Click on the Continue button. The following dialog appears:

PLEASE READ these Release Notes for DECK II™ version 2.2.

Hello and welcome to the newest version of DECK, DECK II 2.2! DECK II is not just a simple update to OSC's original DECK program – it's a whole new application that takes original DECK functions into the world of the digital audio workstation. And this version fully supports the 6 tracks on a Macintosh 660av, 8 tracks on an 840av and 8 - 12 tracks on a Power Macintosh with all DECK features - NO AUDIO CARDS REQUIRED. DECK II offers:

- Non-destructive recording
- Multitrack visual waveform editing with full spot and slip ability
- 24-bit moving fader automation
- Visual editing of automation envelopes
- Synchronized QuickTime movies from disk in a window
- Four in/four out on Sound Tools II
- Continuous SMPTE resynchronization
- Direct links to supported sequencers (such as OSC's METRO) for synchronous

[Save...] [Print...]   [Cancel] [Continue]

This dialog contains basic information and notes about the release. You can choose to print these notes out (using the Print button) or save them to any disk as a text file (using the Save button). These Release Notes contain important information that is not found in this User's Guide. Spending a few minutes now looking over the documentation may save you considerable frustration later.
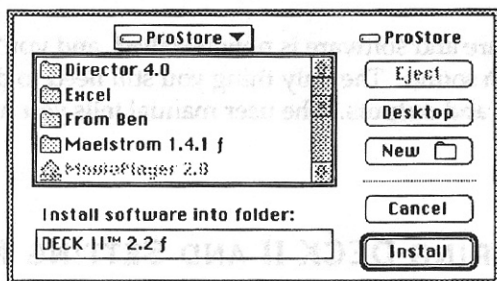
5) When you have read the release information, click on the Continue button. This dialog will appear:

Install the following:

Full Install for all platforms

AV, Numedia & Power Macintosh Install
DigiSystem Install

DECK II™ Install

Installs DECK II and all required extensions and support files for all supported platforms

Installation requires : 960K

[Standard]   [Quit]   [Install]

Use this dialog to select the type of installation you desire. You can always choose the "Full Install for All Platforms" option, if you are unsure of your audio hardware, but it is suggested that you choose the installation that is specific to

the type of audio hardware you have. (If you have no add-on audio hardware, select the AV, PowerMac and NuMedia installation.) If you are simply updating your copy of the DECK II software, and you are sure that you have the correct version of all system software installed, then you can choose the "Install DECK II" option.

6) Make sure you have selected an installation type, then click on the Install button. This dialog will appear:

```
┌─────────────────────────────────────────────┐
│  ┌──── ⊂ ProStore ▼ ────┐    ⊂ ProStore     │
│  │ ▒ Director 4.0      ▒ │   ┌──────────┐    │
│  │ ▒ Excel             ▒ │   │  Eject   │    │
│  │ ▒ From Ben          ▒ │   ├──────────┤    │
│  │ ▒ Maelstrom 1.4.1 ƒ ▒ │   │ Desktop  │    │
│  │ ▲ MoviePlayer 2.0   ▒ │   ├──────────┤    │
│  │                       │   │ New  □   │    │
│  │ Install software into folder: │        │
│  │ ┌─────────────────────┐   ┌──────────┐    │
│  │ │ DECK II™ 2.2 ƒ      │   │ Cancel   │    │
│  │ └─────────────────────┘   ├──────────┤    │
│  │                           │ Install  │    │
│  └───────────────────────────┴──────────┘    │
└─────────────────────────────────────────────┘
```

Use this dialog to select the destination folder for your new DECK II folder.

7) Choose a destination and click on the Install button.

A DECK II folder will be created at your chosen destination, and a copy of DECK II will be placed into that folder.

DECK II uses a simple copy protection scheme that allows you to 'authorize' up to 2 hard disks. You can run your DECK II software on any authorized hard disk, and you can move your DECK II software between any authorized hard disks. Authorized hard disks can be optimized with no risk to the software.

You can also 'deauthorize' any hard disk using your DECK II master diskette, in order to return to your original authorization count. Then you are free to authorize other drives. You can de-install by following the above instructions, but instead of choosing DECK II 2.2 Install in step 6, choose "Deauthorize DECK II."

8) Restart your Macintosh.

Your software is now installed, and you're ready to begin working with DECK II .

WARNING: Like many CPU-intensive programs, **DECK II does not run well with File Sharing turned on.** Although DECK II will run with File Sharing on, its performance will be greatly degraded. For better results, make sure file sharing is turned off before you begin your DECK II Session.
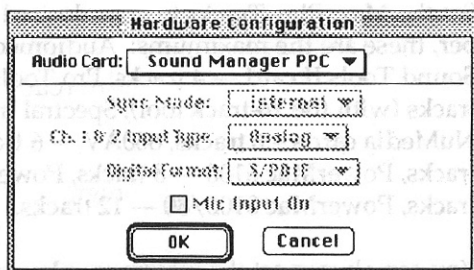
Your hardware and software is now installed, and you're ready to begin working with sound. The only thing you still need to do is hook up audio inputs and outputs. The user manual tells you how to do this.

CONFIGURING DECK II AND SETTING MAXIMUM PLAY TRACKS

Generally, DECK II version 2.2 is quite similar to version 2.0 where basic functions are concerned. Since the major difference between the two software versions is compatibility with new hardware systems, it is important to take note of some simple configuration steps when installing and setting up version 2.2. The configuration issues are two-fold: First, you must make sure your copy of DECK II is set to find the correct hardware (which usually occurs automatically). Second, you may need to set the number of playback tracks. (This is especially true if you are updating to version 2.2 from an earlier version of DECK II, or if you are installing the 8-Track Tool or 16-Track Tool.) Here are directions for accomplishing these tasks:

To set your version of DECK II to the correct hardware:

1) Start up your copy of DECK II.

2) Choose the Hardware Configuration command on the Options menu. This dialog will appear:

```
┌─────────────────────────────────────────┐
│ ▓▓▓▓▓▓▓  Hardware Configuration  ▓▓▓▓▓▓▓ │
│                                          │
│  Audio Card: │ Sound Manager PPC  ▼ │    │
│                                          │
│      Sync Mode:  │ Internal ▼ │         │
│                                          │
│   Ch. 1 & 2 Input Type: │ Analog ▼ │    │
│                                          │
│     Digital Format: │ S/PDIF  ▼ │       │
│                                          │
│           ☐ Mic Input On                 │
│                                          │
│      ┌──────────┐   ┌──────────┐        │
│      │    OK    │   │  Cancel  │        │
│      └──────────┘   └──────────┘        │
└─────────────────────────────────────────┘
```

3) Use the Audio Card pop-up at the top of this dialog to select the hardware you will be using to record and play back audio.

    If you have only one option (such as PowerMac or AV Macintosh) no options will be available, and the correct hardware will be selected and indicated automatically.

Note: If you are running an Audiomedia II card in a Quadra 950, Macintosh AV or Power Macintosh, make sure to choose the **AMII NuBus 90** option. This is required due to the faster NuBus in those machines.

4) Click on the OK button to finish the configuration.

To set the track count on your version of DECK II 2.2:

1) Start up your copy of DECK II.

2) Choose the Memory and Storage preference on the File menu's Preferences submenu. This dialog will appear:

```
┌─────────────────────────────────────────┐
│ ▓▓▓▓▓▓▓▓▓  Memory & Storage  ▓▓▓▓▓▓▓▓▓▓ │
│                                          │
│  Pre-allocate entire record drive:       │
│     ⦿ Never                              │
│     ○ Always                             │
│     ○ When recording 2 or more tracks    │
│                                          │
│  Disk buffer        │ 192   │ Kbytes     │
│  Max. play tracks:  │ 12    │            │
│  Automation buffer: │ 3072  │ events     │
│     MIDI buffer:    │ 20000 │ events     │
│                                          │
│      ┌──────────┐   ┌──────────┐        │
│      │    OK    │   │  Cancel  │        │
│      └──────────┘   └──────────┘        │
└─────────────────────────────────────────┘
```

3) Set the Max. Play Tracks to your desired number. Remember, these are the maximums: Audiomedia card — 4 tracks, Sound Tools II card — 4 tracks, Pro Tools cards — 4 to 16 tracks (with the 16-track tool), Spectral Innovations NuMedia cards – 6 tracks, 660AV — 6 tracks, 840AV — 8 tracks, PowerMac 6100 — 8 tracks, PowerMac 7100 — 10 tracks, PowerMac 8100/80 — 12 tracks.

You can always set the maximum play tracks to a number below the actual maximum available. This is advised if you experience "Disk is too slow" messages, or poor interface response.

Remember, optimum track count can depend on many factors, such as the speed of your drive, the speed of your CPU, and the model of your Macintosh. Using your System drive to record and play media on AV and Power Macintoshes will also decrease your system performance (due to System software design). On such systems OSC recommends use of a non-System hard disk for media recording and playback.

When Power Macintoshes are used, it is OSC policy to allow each user to set their individual maximum track count, rather that limiting track count artificially. As Power Macintosh CPUs and hard disks grow faster (and users upgrade their systems), this scheme allows users to increase their track count immediately, rather than waiting for software updates.

INTRODUCTION TO NEW MIDI FUNCTIONS

DECK II is primarily a multitrack hard disk recording, editing and mixing environment, but DECK II offers the ability to augment your system with the use of MIDI. This chapter of the DECK II manual focuses on the specific tasks you'll need to understand, in order to get the most out of DECK II's MIDI functions. Using the MIDI functions will enable you to synchronize your Session to SMPTE timecode, use DECK II as a master timecode source, import a MIDI file for synchronous playback with your Session, and control DECK II with an external MIDI device. You can also use OSC's METRO sequencer (or any other capable sequencer) to edit MIDI files and digital audio at the same time.

MIDI Preferences

The next step in configuring your system for MIDI is opening the MIDI Preferences on the Preferences Submenu on the File Menu. When you choose this command, the following dialog will appear:

```
┌──────────────────────────────────────┐
│ ▓▓▓▓▓▓▓ MIDI Preferences ▓▓▓▓▓▓▓      │
│  ☒ Split channels on incoming MIDI files │
│  Default output port:   │ Wavestati...▼ │
│  Timecode output port:  │ ADAT Input ▼ │
│      ( Cancel )    (    OK    )       │
└──────────────────────────────────────┘
```
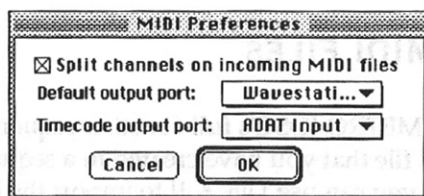
Use this dialog to set the following characteristics for DECK II:

Split channels on incoming MIDI files: When this preference is on, DECK II will split the channels when you import a MIDI file. This is useful when you are importing Type 0 MIDI files, which store all track data in one channel.

Default Output Port: This pop-up lists your MIDI ports and uses the first one on the list as the default output port. To change the port, simply select a different port using the pop-up menu.

Timecode Output Port: This pop-up controls through which port outgoing MIDI Timecode is sent. To change the port, simply select a different port using the pop-up menu.

Note: If you plan to import large MIDI files, you should first increase the MIDI buffer size in the Memory and Storage Preferences. Remember, whenever you increase the buffer size, you should also increase the amount of RAM allocated to DECK II. For more information, see the Memory and Storage Preferences in the Reference section of the user manual.

You have now finished configuring your MIDI setup and can use any of DECK's MIDI functions.


SENDING MIDI TIMECODE

You can use DECK II as a timecode master very easily. Simply choose the Send Timecode command on the Options menu. Deck II will automatically generate timecode and send it through the Timecode Output

Port you chose in the MIDI Preferences. To stop sending Timecode, choose the command again. You can tell if DECK II is sending timecode by looking for a check next to the command. If the command is checked, DECK II is sending Timecode.

IMPORTING MIDI FILES

If you do not own METRO (OSC's full-function sequencer) but would like to hear a MIDI file that you have created in a sequencer play back with your Session, you can use DECK II to import the MIDI file. First, open up the MIDI window (choose MIDI from the Windows Menu.) It will look like this:
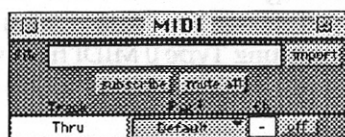
Click on the Import Button. This will bring up a standard file dialog asking you to pick a file to import. When you have opened the file, DECK II will take a few moments to translate the file. When DECK II is finished importing the file, the MIDI window will look something like this:
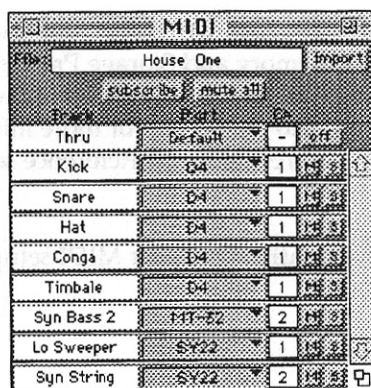
You can change the MIDI file that is played with the Session by clicking on the Import button again and choosing a new file. DECK II will erase the previous MIDI data to make room for the new file.

MIDI files are imported with their tempo maps, and DECK II will play back those tempo maps AND display audio bar/beat data according to those tempo maps. To view audio waveforms visually adjusted to tempo-accurate bar/beat display, just choose Beat on the Option menu's Time Mode submenu.

Important: DECK II's tempo indicator only shows you the first tempo of any MIDI file. The display is not updated to show each new tempo. Entering a new tempo will clear out the existing tempo map and set the Session to that single new tempo.

Note: You can also use the Import MIDI File command on the File Menu to bring up the same dialog. You can use the Dispose MIDI File command on the same menu to erase the current MIDI file without importing new data.

If you plan to make changes to your current MIDI file, you can turn on the subscribe button. This will enable DECK II to reflect those changes in your Session. For more information on the Import and Subscribe functions see the Reference section of the user manual.

MIDI THRU

Another of DECK II's MIDI functions is MIDI thru. To use MIDI thru, open up the MIDI window, and press the button on the Thru track. It will look something like this:
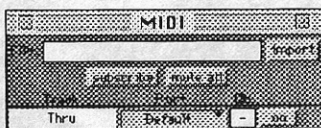
Deck II will take all MIDI events coming into the in port and send them back out the port you choose on this track. You can change the port by clicking on it and selecting a new port using the pop-up menu.

QUICKTIME ENHANCEMENTS

Version 2.2 of DECK II offers some simple, but important QuickTime enhancements. Perhaps the simplest of this is support for QuickTime 2.0. At the feature level, version 2.2 now offers the ability to center the QuickTime movie on its screen (available on the QuickTime menu) and

support of new 16-to-8 bit conversion schemes, including rounding and dithering (available under the **Levels** preference on File menu's Preferences submenu).

The most interesting new QuickTime features are scrub video (which allows you to drag smoothly through video on your hard disk) and scrub-to-spot (which lets you select an audio region in the Track window, and drag through video frames to spot that region on a specific frame). Here's how they work:

To scrub video direct from the drive:

1) Open or create a DECK II Session

2) Import a QuickTime movie using the Import Movie command on the QuickTime menu. The QuickTime movie appears in a window.

3) Place the mouse cursor over the QuickTime window. Then click and hold down the mouse button. The arrow cursor changes to a right-left triangle as shown below:

4) While holding the mouse button down, drag to the left (earlier) or right (later) to scrub video directly from the drive. Let go of the mouse button to stop scrubbing.

To use scrub-to-spot:

1) Open or create a DECK II Session

2) Import a QuickTime movie using the Import Movie command on the QuickTime menu. The QuickTime movie appears in a window.

3) Select an audio region or group of regions in the Track window.

3) With one or more regions selected, place the mouse cursor over the QuickTime window. Then click and hold down the mouse button. The arrow cursor changes to a right-left triangle.

4) While holding the mouse button down, drag to the left (earlier) or right (later) to find the video frame upon which the selected audio should start. Then let go of the mouse button to auto-spot the selected region or regions on that frame.

When you let go, the entire Track window selection will be moved so that it starts on the frame you chose. Use this function for quick spotting of sound effects of music edits.

Note: Remember, Sessions are set to have a nominal length of 10 seconds if they contain no audio. If you wish to play back an QuickTime movie with no audio loaded, use the Session End Time command on the Session menu and set the Session length to be longer than the movie duration.

VIRTUAL MIXING

A Virtual Mix command is now available on the Process menu.

This command controls which tracks DECK II will mix when you choose the Bounce or Mix to Disk command. When this command is off, DECK II will mix only the four to twelve active Play tracks. This will create a mix that sounds exactly the same as when you play the session. However, when this command is on, DECK II will also mix whatever audio is on the Work tracks. Because DECK II's automation follows the playlist, this allows you to create a much more complex mix.

LIBRARY WINDOW

The DECK II Library Window offers you an easy way to organize your source material for quick pasting into the Track window. You can view and use the Library Window by choosing the Library Window command on the Windows menu.

The first column in the window shows you the names of the regions you have placed in the Session using the Add Audio command. The second column shows you the length of the region, and the third column shows you the location on your hard drive of the associated audio file. You may paste a region into the Track window using one of two methods. The simplest method is to click and hold on the desired region. The cursor will change to an arrow. Move the mouse into the Track window, and let go of the mouse button over the desired location. You can spot audio quite accurately using this method by observing the current time in the data indicator boxes. You may also copy and paste from this window into the Track window.

Hint: If you are importing large quantities of material, use the Add Audio dialog to import all of it. Then use the Library window to spot the regions accurately, rather than pasting them directly into the Track window.

The Library window will only show regions that you have imported into DECK II. If you want to see all regions in your Session in this window, select the **Update from Session** command from the new Library Operations Submenu in the Session menu.

A NOTE ABOUT STEREO RECORDING

Please note that within DECK it is possible to record two tracks in stereo by record-enabling two separate tracks simultaneously; be sure to assign input 1 to the first track and input 2 to the second track. In order to achieve true stereo separation during playback, remember to pan both tracks hard left and hard right respectively.

APPLE EXTENSION CONFLICTS

For optimal performance, please remove these and any other third party Extensions from the Extensions Folder within your System Folder.

- Apple CD-ROM driver
- Filesharing Extension
- Serial Extension
- DAL
- Express Modem

There have been a number of reported problems which real-time programs such as DECK II might encounter when the Apple CD-ROM driver is used. If you experience problems when using your Apple CD-ROM, please contact OSC for a recommended CD-ROM driver replacement.

OPCODE'S OPEN MUSIC SYSTEM

OSC recommends installing OMS when using DECK II for MIDI-intensive applications (such as running METRO or syncing to external MTC). In fact, OMS is required when using a multi-cable MIDI interface such as the MIDI Time Piece, Studio 4 or Studio 5.

ALLOCATING MORE RAM TO DECK II

In many instances DECK II will require more RAM than the amount pre-allocated as the factory default. In fact, when working with a DECK II Session approaching an hour's length or more, OSC suggests you add at least 3MB additional to DECK II's RAM partition. DECK II is unique in that it can display a file overview of any length—anywhere from milliseconds to minutes to hours. Therefore, special attention must be paid to DECK II's RAM allocation partition. The following steps detail the method for increasing (or decreasing) DECK II's RAM partition:

1) Quit DECK II, or be sure that DECK II is not running.

2) From within Finder, select the DECK II program icon (single-click on the DECK II program).

3)   Choose Get Info from the File menu.

4)   Within the Get info dialog, increase the RAM partition
size in the Preferred Size field to a number that will run
comfortably within the confines of your machine's installed
RAM (remember to leave enough free RAM for the System
and any other applications you wish to run in tandem with
DECK II). User's with only 8MB RAM should not allocate
more than 6000K to the DECK application.

5)   Close the Get Info window. DECK II will now remain at
the newly designated RAM partition size.

Note: Choose About This Macintosh under the Apple menu from
within Finder in order to keep track of unused RAM, System RAM,
application RAM, and total installed RAM.

RECORD MONITORING AND INPUT LEVEL SETTING ON POWER MACINTOSHES

Power Macintoshes require the use of the 16-bit Sound Manager for
audio input and output. This version of the Sound Manager comes
installed on these systems. The Sound Manager forces some restraints
on input level settings and record (playthrough) monitoring. Here is a
detailed description of these restraints:

Input Level Settings: The input level on Power Macintoshes can be set
from within DECK II using the Audio Input Level popup at the bottom
of the Options menu. It is important to realize that this popup **lets you
set the level of a low-quality built-in preamplifier.** This means you can
boost the level of any incoming signal, but any boost will noticeably
degrade the quality of the signal. For best results, set the Audio Input
Level to '0' and turn up your audio source (instrument or mixer) until it
registers well in the input meters. Remember, a setting of zero **does not**
turn off the input. It turns off the low-quality on-board preamp.

Record Monitoring: The Sound Manager imposes some limitations
where record monitoring is concerned. Record monitoring is the process
of 'listening back' to the signal being recorded. Normally, DECK II
allows you to adjust the level of the record monitoring during recording,
however this is not supported by the Sound Manager. For this reason,

you cannot change the monitor volume or pan of any track that is being recorded. (Of course, these settings can be altered dynamically once the track has been recorded.) That means that recorded tracks will always echo back through the system at their full volume, and will monitor through the channel set as their input channel. (In other words, you cannot record from input 1 and monitor through output 2.) Note also, that recording on a single track from a single input will always automatically monitor back through both outputs. Until Apple changes the Sound Manager (or OSC creates special technologies to alter these conditions), you can always compensate for these constraints using an external mixer.

HOW TO COMPACT SESSIONS: A REVIEW

The Compact Session command (on the Session menu) is a command that allows you to recover any disk space occupied by unused takes and other throw-away audio. It is a very useful function, but you must use it carefully to make sure you don't throw away important audio. Here's how to Compact your Session:

1) Enable Rewrite Region list under DECK's General Preferences on the File menu.

2) Delete all unwanted audio regions from within the Tracks window (remember this includes Work Tracks).

3) Open the Library Window.

4) Choose Update Library From Session on the Session menu's Library Operations submenu.

6) Choose Save on the File menu.

7) Choose Compact Session on the Session menu. You can now set the handle length (explained in the DECK II manual) and the compaction will be executed.

Note: For safety purposes, only audio files contained within the current Session's audio files folder will be affected by the Compact Session command.

THE SESSION INFO DIALOG

DECK II version 2.2 contains a new Session Info dialog that tells you quite a bit about the current Session and allows you to view, play, rename and delete audio files associated with the Session.

To see Session info:

1) Open a Session in DECK II.

2) Choose the Session Info command on the Session menu. This dialog appears:

```
══════════════════ Session Info ══════════════════
                  Free RAM: 6569kB
             Free disk space: 11MB
                Sample Rate: 44100
          Free automation events: 3071
             Free MIDI events: 19999

Files in session:
┌──────────────────────────────────────────────────────┐
│Audio/Video:Desktop Folder:Bbsjgrf:Bbsjgrf audio files:PlayList 4│
│Audio/Video:Desktop Folder:Bbsjgrf:Bbsjgrf audio files:Mix File 355831│
│Audio/Video:Desktop Folder:Bbsjgrf:Bbsjgrf audio files:PlayList 2│
│Audio/Video:Desktop Folder:Bbsjgrf:Bbsjgrf audio files:PlayList 1│
└──────────────────────────────────────────────────────┘

     ┌─ Show ─┐  ┌─ Play ─┐  ┌─ Rename ─┐  ┌─ Delete ─┐

              ┌──────── OK ────────┐
```

This dialog shows you the Session's vital information, and a list of the audio files associated with the Session. To view, play, rename or delete audio files, just select the audio file and click on the desired button. Note that the Showbutton will actually take you out to the Finder and select the audio file you have highlighted.

Note: When you want to rename audio files, make sure to use the Session Info dialog's Rename button. Simply renaming the file in the Finder will force you to 'refind' the file the next time you reopen the Session. **DO NOT** switch out of a Session and rename a file while the Session is still open. This can cause unpredictable results.
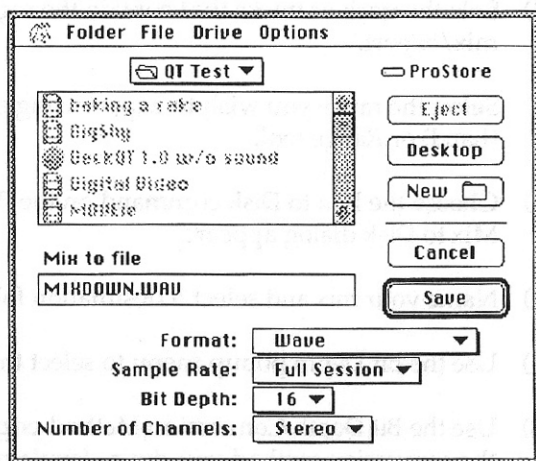
EXPORTING WAVE AUDIO FILES

Version 2.2 of DECK allows you to save any audio file or audio mix in the WAVE (.WAV) format for use on the PC platform. Here's how to do it:

To export files in the WAVE format:

1) Open the DECK II Session that contains the file or tracks you wish to export.

2) Solo the track or tracks that contain the regions you wish to export.

3) Select the range you wish to export using either the Object (hand) or Range tool.

4) Choose the Mix to Disk command on the Process menu. This dialog appears:

5) Name your mix and select a destination folder.

6) Use the Format popup menu to select the Wave format.

7) Click on the Save button.

After a few moments your Wave-format audio file will
appear in the selected destination folder.

EXPORTING 8-BIT AUDIO WITH DITHERING OR
ROUNDING

One important change in DECK II version 2.2 is the addition of high-
quality 16-to-8 bit conversion schemes. These schemes make it possible
to create reasonably good-sounding 8-bit mixdowns from your 16-bit
DECK source audio. In the past, DECK II only offered truncation as a
conversion method, which generally produces poor results, especially on
lower-level signals. Version 2.2 also offers two rounding methods and a
dithering method. Here are directions for using them, and explanations
of what they do:

1) Open the DECK II Session that contains the file or tracks you
    wish to mix or export at 8-bit resolution.

2) Solo the track or tracks that contain the regions you wish to
    mix/export.

3) Select the range you wish to export using either the Object
    (hand) or Range tool.

4) Choose the Mix to Disk command on the Process menu. The
    Mix to Disk dialog appears.

5) Name your mix and select a destination folder.

6) Use the Bit Depth popup menu to select the 8-bit output.

6) Use the Bit Depth Conversion Method popup menu to select
    the conversion method you desire (explained below).

Bit depth conversion method: | **Dithering** ▼ |

You can also set this under the Levels preference found on
the File menu's Preferences submenu.

7) Click on the Save button.

   After a few moments your 8-bit converted audio file will
   appear in the selected destination folder.

Here are explanations of the different bit depth conversion methods:

Truncation: This method simply takes the high byte as the sample
value and throws away the low byte. Truncation often causes unpleas-
ant artifacting, especially on low-level signals and human speech.

Rounding: This method treats the 16 bit sample as a fixed point number
with the decimal point between the bytes. If the fractional part (the low
byte) is greater than or equal to 0.5 then 1 is added to the high byte
(hence 'rounding') and the high byte is taken as the sample value.

Convergent Rounding: This method differs from rounding in how it
treats the value of 0.5 in the low byte. 1 is only added to the high byte if
the low-byte value is equal to or greater than 0.5 **and the high byte is
even.** Otherwise the high byte is taken as the sample value.

Dithering: Dithering applies a low-level 'noise' signal, which is used to
'mask,' or cover up the unpleasant artifacting created by truncation. It is
also called error diffusion dithering.

The results of these conversion methods very much depends on the
source material you use. Generally, rounding and dithering will pro-
duce better results than truncation. You will need to experiment with
these settings to see which method works best for your material.

CONTINUOUS RESYNCHRONIZATION AND PITCH CONTROL

As most users of synchronization know, DECK II is capable of software-
based continuous resynchronization to SMPTE timecode. (In fact, DECK
II's native setting is continuous resync, as opposed to trigger sync.) This
is explained at length in the main user manual. However, users of DECK
II on AV and Power Macintoshes should be aware of a few special notes.

AV Macintoshes and Power Macintoshes are not capable of performing real-time sample rate conversion tasks with track counts of more than four tracks. This impacts users in two areas: First, the Transport window's Pitch control will automatically switch off tracks 5 and above while pitch is being set or changed. Resetting the pitch to zero (0) change will turn on all tracks again. A message will appear to inform you of this. The second point concerns continuous resync. When syncing DECK II to external SMPTE on an AV or Power Macintosh with more than four tracks set to play, trigger sync will be turned on automatically. To avoid this autoswitch and retain continuous resync, you will need to mix down your tracks to four playback tracks, or set the Max Play Tracks to 4 using the Memory and Storage preference on the File menu's Preferences submenu.

TROUBLESHOOTING TIPS AND SUGGESTIONS

<u>Power Macintosh and AV Model Tips and Suggestions:</u>

Cannot record in stereo; no stereo separation:

- Make sure you are using stereo, as opposed to mono, adapters on the AV's inputs and outputs. The illustration on the next page shows stereo mini-plugs.

- Be sure that your adapter fits snugly in the input and output sockets.

- Remember to set each record track to a different input. Do this by dragging on the Input number near the top of the channel's mixer module:
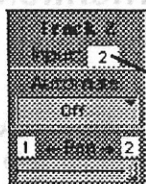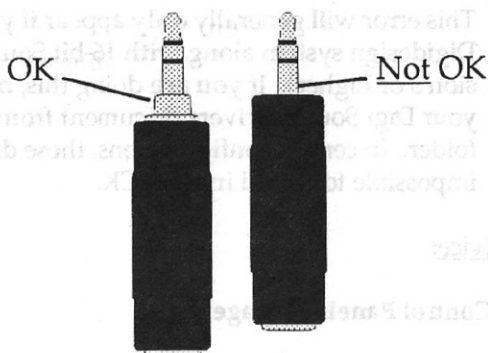

click and drag here
(up or down)

Scratchy-sounding audio:

- Be sure to use a stereo 1/8" adapter (1/2" tip) with a with a tapered base that is slightly raised above the adapter's

casing. The input socket on the AV will prevent certain "flat headed" 1/8" adapters from making full stereo contact. Refer to diagram below:

OK — Not OK

Remedies for clicks and pops on Mac AV machines:

- Install asynchronous SCSI Manager 4.3 compatible drivers on all external SCSI devices (OSC recommends the Anubis Drivers V2.5.1 [or higher] from Charismac Engineering).

- Install HD SC Setup V7.2.2 (or higher) on Apple internal hard disk.

- System 7.1 users must install Hardware System Update V3.0 (from Apple Computer) to optimize the System software to better run on AV machines.

- It is important to record audio data to a hard drive that does not contain the System Folder (for this reason, two disk drives are recommended for Mac AV machines).

- Install A/ROSE v1.2 (from Apple Computer) into the Extensions folder to avoid "Floating Point Coprocessor not installed" errors.

- Set Memory Control Panel Disk Cache Size to 32K. If clicks persist, begin working upwards (64K, 96K, 128K)—try not to exceed 128K.

You get a -2500 series error when you try to record.

- This error will generally only appear if you are running a Digidesign system along with 16-bit Sound Manager (version 3 or higher). If you are doing this, make sure to remove your Digi Sound Drivers document from your Extensions folder. In certain configurations, these drivers may make it impossible to record into DECK.

General Advice:

Extension/Control Panels Management:

- Apple's Extension Manager program, available free on most BBS's, comes in extremely handy for general troubleshooting practices, as well as maintaining custom Mac environments optimized for specific applications, such as DECK and Metro. Extensions Manager comes pre-installed with System 7.5.

Disk Defragmentation/Optimization:

- Do not use "split" mode in Disk Express II to optimize your hard drive — "split" mode fragments your files beyond playability. For this reason, OSC has found that Norton Utilities' Speed Disk program is much better suited for defragmenting large digital audio files.

Problems Initializing Playback Engine:

- Try throwing away DECK Preferences, from the Preferences Folder within the System Folder, if receiving the error message "Problems Initializing Playback Engine. Audio hardware may not be supported". DECK will automatically create a new Preferences File reverting back to it's factory default settings and this usually rectifies the problem.

- DECK users with Digidesign hardware must also throw away the **DigiSetup** and **DigiCommFile** (if available) files from within the System Folder. Both files will be automatically recreated.

RAM-Related Problems:

Allocate more RAM to DECK II's memory partition remedy any of the following errors:

- Calculating File Overview dialog continually appears when attempting to scroll or navigate through the Tracks window.

- Couldn't complete the last command because of a Mac OS error. -108.

- Couldn't complete the last command because of a Mac OS error. -2012.

- Increasing DECK II's HD Buffer Size within Memory and Storage Preferences without, in turn, increasing DECK II's RAM partition usually results in the error **"Problems Initializing Playback Engine. Audio hardware may not be supported"** when attempting to relaunch DECK II.

Rectifying -39 (End of File) Errors:

The -39 error signifies an "end of file" error in which a region's start and end times have somehow become corrupted. These errors can occur when importing regions from files originally saved in Sound Designer II. There have also been a few reported instances of these errors during playback within a DECK II Session. Both instances of this error can be remedied using the following steps:

-39 error during playback:

- Take note of which region (or regions) is actually causing the -39 error (DECK will usually stop playback the exact instant it hits the start point of the problematic region or regions).

- Take note of the problematic region's original position.

- In Object mode, Trim the problematic region inwards (to make the region smaller).

- Trim the region a second time and extend it back to its original duration.

- The -39 error should now be rectified since the region's start and end times have now been redefined by the Trim tool.

-39 error when importing from regions originally saved in SDII:

- Rebuild the Desktop File on all of your drives (Restart your Macintosh while holding down the command-option keys).

- Load SDII and redefine the problematic region(s).

- Save the audio file within SDII.

- Import the region(s) into DECK II via Add Audio to Clipboard.

DECK II KEY COMMANDS AND SHORTCUTS

One of DECK II's strongest features is the deep implementation of key commands and shortcuts to speed up editing for the advanced user. Here is a comprehensive list of the different key commands and shortcuts in the DECK II interface:

<u>**TRACK WINDOW:**</u>

[	zoom in wave amplitude
]	zoom out wave amplitude
c	turns cue loop on and sets cue from current selection
tab	move to next location time
shift-tab	move to previous location time
enter	enters new location time during playback
+	moves selection 1 frame ahead in time
-	moves selection 1 frame back in time
return	return to zero
tilde (~)	toggle between Range and Object modes
spacebar	play/stop/continue
control-spacebar	play from last insertion point
shift-spacebar	audition selection

option-c	turns cue loop off
option-[....	full zoom in wave amplitude
option-]	full zoom out wave amplitude
command-]	jump to left of selection
command-[....	jump to right of selection
arrow keys	move selection up/down/left/ right
command left/right arrow	move selection by current Nudge time or Grid Unit
option-click on magnifier	zoom in/out 2X
shift-option-click on magnifier	zoom in/out 4X
command-click on left magnifier (-)	zoom full out
command-click on right magnifier (+)	zoom full in
command-click on fit selection	fit selection towards right
option-click on fit selection	fit selection towards left
option-click on track view display	change all track displays to new views mode
option-click on automation mode disp.	change all track automation displays to new mode
command-click on Playlist name	rename Playlist
command-click on volume display	brings up volume text entry dialog
command-click on panning display	brings up panning text entry dialog
option-click panning slider	sets pan position to center
option-click volume slider	sets volume slider to 0dB
command-click on horizontal scroll bar	moves Track window view by half screen increment
command-shift-option-u	recalculate all region overviews
x-drag	fit marquee to full screen without changing selection
s-drag	solo scrub current track
option-s-drag	scrub all tracks
option-command-v	Paste At

TRACK WINDOW (RANGE MODE ONLY):

a-click	select whole region or empty space between regions
shift-a-click	extends selection/insertion point to region boundary
option-shift-a-click	extend selection/insertion point to beginning/end of Session

shift-a-left/right arrow .... extends selection/insertion point to region boundary

option-shift-a-left/right arrow .... extend selection/insertion point to beginning/end of Session

z-drag .... fit new selection to full screen

option-left/right arrow .... move selection left/right by selection amount

control-left/right arrow .... collapses selection to left or right

shift-left/right arrow .... extends selection to left or right

TRACK WINDOW VOLUME OR PANNING VIEWS:

shift-click .... on existing automation event to constrain time

command-click .... enters new automation breakpoint

control-command-click .... enters new automation break point with same level as preceding breakpoint

TRACK WINDOW VOLUME OR PANNING VIEWS (RANGE MODE ONLY):

control-click .... on existing automation event to constrain level or percentage

TRACK WINDOW VOLUME OR PANNING VIEWS (OBJECT MODE ONLY):

control-click .... on automation event to bring up event entry dialog

command-up arrow .... nudge up selected automation points pixel by pixel

command-down arrow .... nudge down selected automation points pixel by pixel

command-left arrow .... nudge left selected automation points pixel by pixel

command-right arrow .... nudge right selected automation points pixel by pixel

command-option-left/right arrow .... copies selection to left or right

TRANSPORT WINDOW:

control-click on location time .... to bring up associated begin-
ning and end times
option-click on counter .... scrolls Track window to counter
location

QUICKTIME WINDOW:

left/right arrow .... move QT movie backwards/
forwards by a single frame
up/down arrow .... move to beginning/end of QT
region

LIBRARY WINDOW:

shift-spacebar .... audition selection

MIXER WINDOW:

option-click panning slider .... sets pan position to center
option-click volume slider .... sets volume slider to 0dB
command-click on volume slider .... brings up volume text entry
dialog
command-click on panning slider .... brings up panning text entry
dialog
command-click on Input number .... enter Input numerically
command-click on panning output .... enter panning output numeri-
cally
click on upper VU LED .... reset individual Clip Indicator
option-click on upper VU LED .... reset all Clip Indicators
command-click on Playlist name .... rename Playlist

That concludes the DECK II 2.2 Manual Addendum. Please consult your
DECK II manual for any other information.

Part #: DUA2 Rev: 1/95