DaD plus

User Manual

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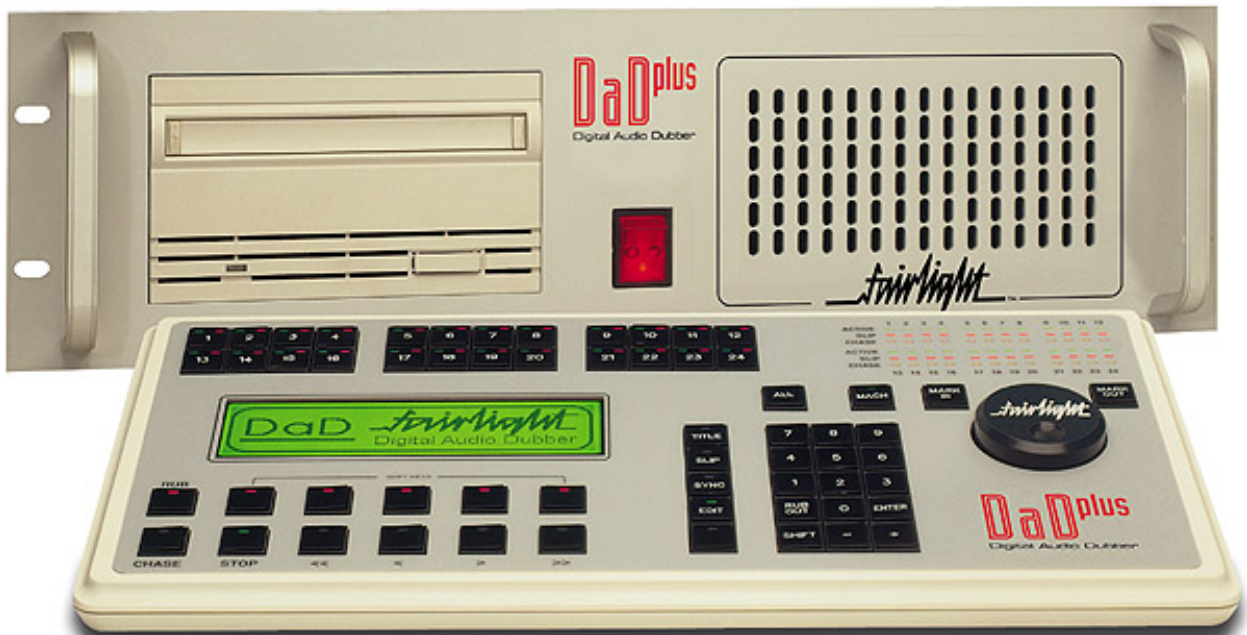
fairlight
THE BENCHMARK IN DIGITAL AUDIO ™

Contents

1.   Introduction

Fairlight's Digital Audio Dubber (DaD^{plus}) was created for use as a playback device in film and television sound mixing sessions, replacing commonly used machines such as multi-track tape machines and magnetic sprocketed dubbers. It was also designed as a cost effective playback system wherever large numbers of tracks must be played back cost effectively.

DaD^{plus} is able to play project files created by Fairlight MFX3^{plus}, Digidesign Pro Tools™ and Akai DDPlus™ audio editing systems as well as audio edits from the Avid™ family of video editing platforms when converted to Pro Tools™ using utilities available from Avid™.

2.   Physical Components

The MFX Dubber System consists of two major components: the FC-100 Controller and the FD-24 Audio Dubber.

FC-100 Controllers and Audio Dubbers can be connected in a network allowing simultaneous control of up to 24 Audio Dubbers from multiple Controllers.

2.1   The FD-24 Audio Dubber

Each Audio Dubber is a rack mounted digital audio reproducer for up to 24 simultaneous channels.

The Dubber is able to self-synchronise to time code at any industry standard frame rate in the forwards or reverse direction. In addition, it can lock its Master Sample Clock to an external video or word clock reference.

The following section describes the hardware components of the Audio Dubber.

2.1.1 Audio Channel Card

Each Audio Channel card can reproduce four simultaneous mono audio clips, with up to 4 bands of equalisation on each clip. Additionally, any of the reproduced clips may contain crossfades, which are performed in real time.

An Audio Dubber may contain up to 6 Channel cards.

2.1.2 The CPU Card

The CPU card performs functions required by the unit as a whole. These include file handling, disk accessing, user interface and synchronisation. To make these functions happen, its hardware includes a microprocessor, a SCSI chip and a dedicated time code reader and processor.

2.1.3 Storage

Each Audio Dubber contains an internal hard disk which is used purely for software and caching requirements. In addition the unit may contain a fixed hard drive, a docking bay for a removable hard disk, and/or a magneto-optical drive, or may connect to any of these via the SCSI port at the rear of the machine.

Audio may be loaded on to the Dubber on removable optical media or removable disk drives. Projects on these drives are played directly.

2.1.4 Connections to the FD-24 Audio Dubber

The diagram below shows all the connections to the rear panel.

RS-232 Port

Used for computer connec-
tion, DaDView interfacing
and debugging.

Time Code Input/Output

Used for longitudinal time code.

SCSI

Used to connect extra hard
or magneto optical disks.

DaD CPU DaD I/O DaD I/O DaD I/O DaD I/O DaD I/O DaD I/O DaD Timecode

RS-232

Video
Sync

Video
Sync

Analogue
Output

Digital
Output

TC
IN

TC
OUT

Control
Port 1

Control
Port 2

fairlight

Manufactured in Sydney, Australia by Fairlight ESP Pty. Ltd.

WARNING: Hazardous voltages inside. No user serviceable parts
inside. Refer service to authorised Fairlight personnel.

NEVER remove or insert circuit cards with power switched on.

ALWAYS power
down before
adding or
removing a SCSI
device.

fairlight

S/N DADR50008

Product Type: DaD

Professional
Audio Equipment

SCSI

Power
supply
Rating:
100/110/220/
240 Volts
50/60 Hz
150 VA.

No user
changeable
fuses

House Sync

Video, 256xFS or
word clock sync
reference input.

Audio Outputs

Both analogue and digital
(AES/EBU) outputs are
available on different
connectors. Each connector
handles 4 mono outputs.

Control Network Ports

One port is used for the
incoming control signal, and
the other to pass this signal
along to the next unit. The
control network allows
multiple units to be connected,
forming a "daisy chain"
between units.

Power Input

Senses voltage
automatically.

Note: On Dubber systems fitted with fewer than 24 playback channels, connectors are provided only for the audio channels that are present.

2.2 The FC-100 Controller

The Controller can be used to control up to 24 Dubbers at the same time, each with up to 24 tracks of playback. The 24 Dubbers are represented by the Dubber Status Lights, and are selected using the Machine Key and the Track keys.

Track Keys

Used to select tracks for slipping etc. If the Machine Key is selected, these keys select Audio Dubbers. The LEDs in these keys show track status i.e. active, selected, slipped (details later).

Soft Keys

The function of each key is written above it on the LCD screen

Rub Key

Press this key and then a Track Key to produce test audio output from selected track.

Fast Forward

Causes selected Dubber to move forward at sixteen times play speed (if Chase is off or no time code present). Pressing the key again increases the speed.

Play

Causes selected Dubber to play forwards. (If Chase is off or no time code present)

Chase

Enables time code chase mode for the selected Dubber.

Stop

Causes selected Dubber to stop (if Chase is off or no time code present).

Rewind

Causes selected Dubber to move backwards at sixteen times play speed (if Chase is off or no time code present). Pressing the key again increases the speed.

Reverse Play

Causes selected Dubber to play in reverse (if Chase is off or no time code present)

Machine Key

Press this key and then a track key to select an Audio Dubber

Dubber Lights

Show the status of each Dubber controlled by the FC-100 (details Page 9)

Mark In / Out

Not used in this version of software.

All Key

Selects all tracks. If the Machine Key is pressed, selects all Audio Dubbers.

Menu Keys

Used to change the menu on the LCD Screen.

Shift Key

Hold Shift key down while pressing various keys to enable alternative functions (details described later in this manual).

Numeric Keypad

Used for typing time codes and entering parameter numbers

Increment / Decrement

Used to advance and retard tracks, also to change parameters in some of the menus.
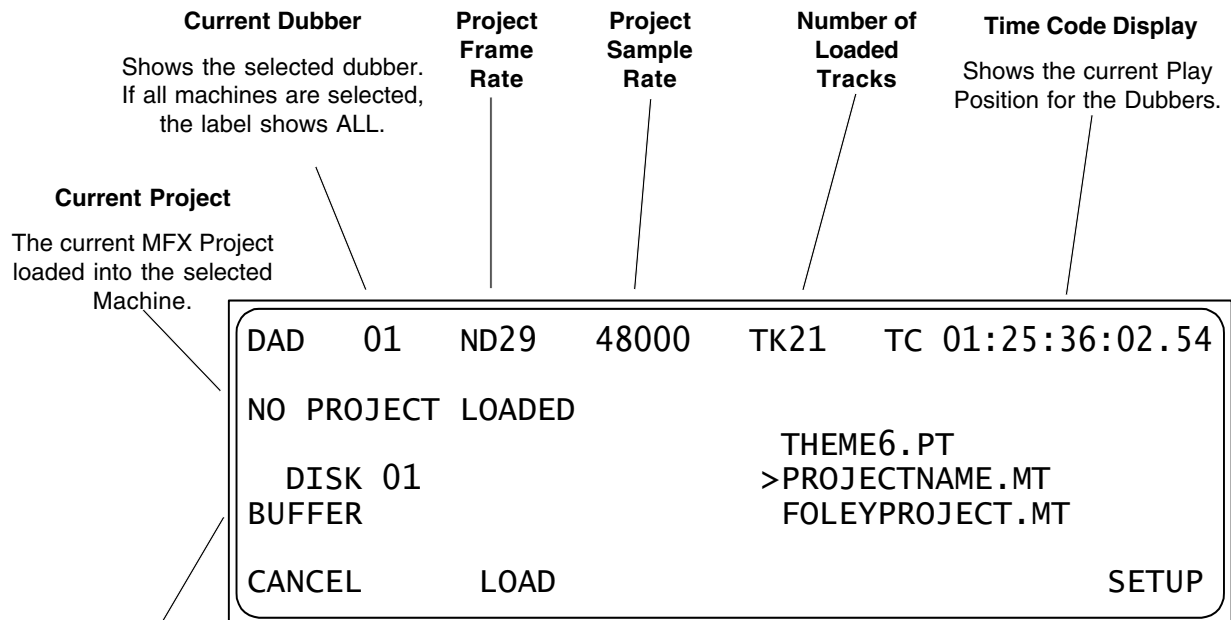
Jogger Wheel

Used for jogging selected Dubber with audio scrubbing (if Chase is off or no time code present), and for slipping tracks and changing parameter numbers
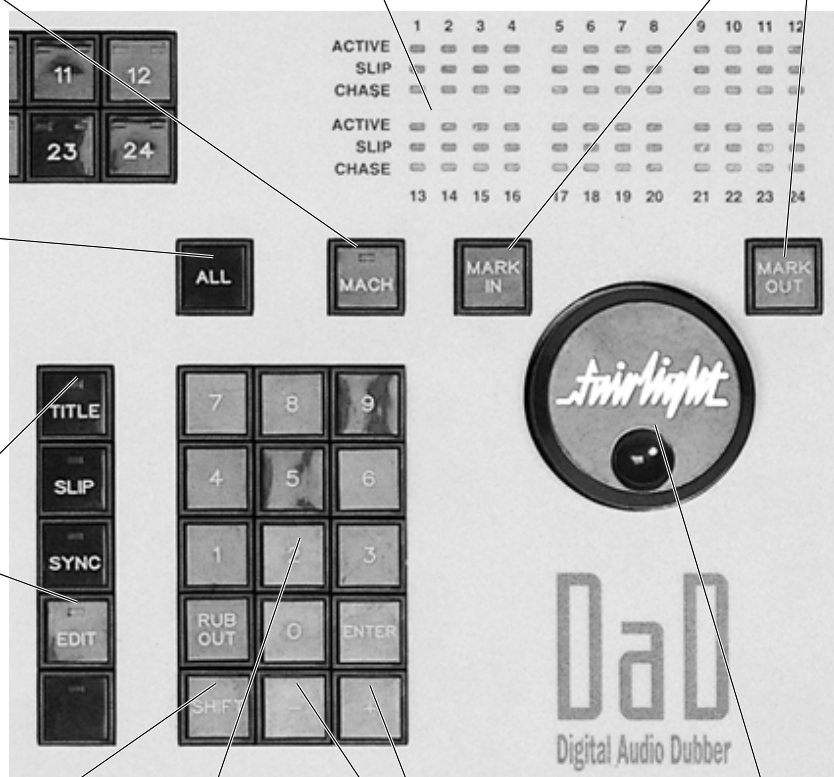
2.2.1 The LCD Screen

The LCD screen is used as a guide to the status and operations in the DaD^plus. It contains all of the command options available through the Soft Keys, and displays other text and numeric information.

The contents of this screen vary according to the context, but the items listed below are almost always present.

Current Dubber

Shows the selected dubber. If all machines are selected, the label shows ALL.

Project Frame Rate

Project Sample Rate

Number of Loaded Tracks

Time Code Display

Shows the current Play Position for the Dubbers.

Current Project

The current MFX Project loaded into the selected Machine.

```
┌──────────────────────────────────────────────────┐
│ DAD   01   ND29   48000   TK21   TC 01:25:36:02.54 │
│                                                    │
│ NO PROJECT LOADED                                  │
│                         THEME6.PT                  │
│   DISK 01              >PROJECTNAME.MT             │
│ BUFFER                  FOLEYPROJECT.MT            │
│                                                    │
│ CANCEL        LOAD                        SETUP    │
└──────────────────────────────────────────────────┘
```

Buffer Status Indicator

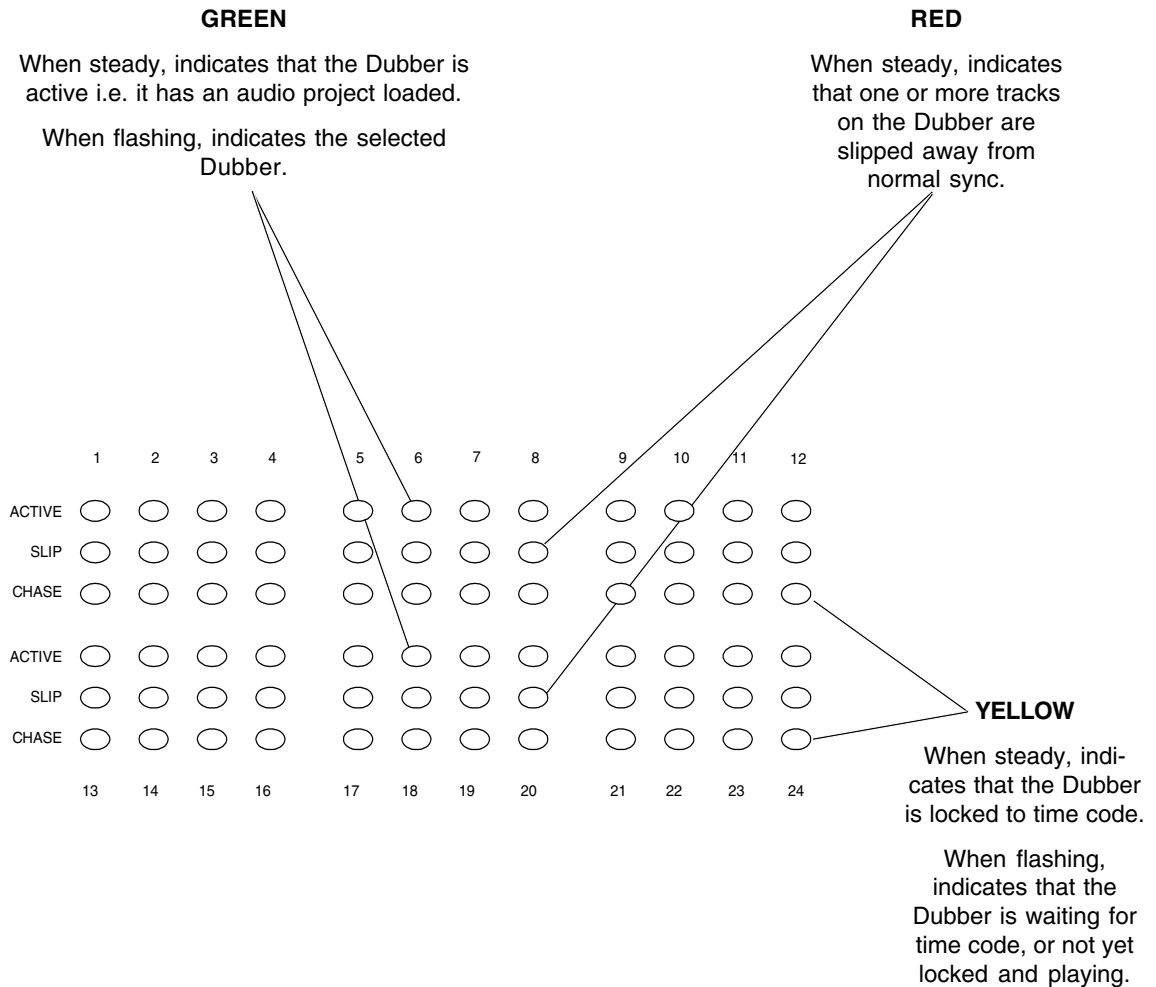Indicates the amount of audio data loaded into the buffer.

Menu

Most editing and setup commands are accessed through the Menus in the Liquid Crystal Display (LCD).

First you press a menu key (one of the four keys at the right of the LCD). Then you select an item from the LCD menu by pressing the Soft Key immediately below. Sometimes this will open another menu with more Soft Key choices.
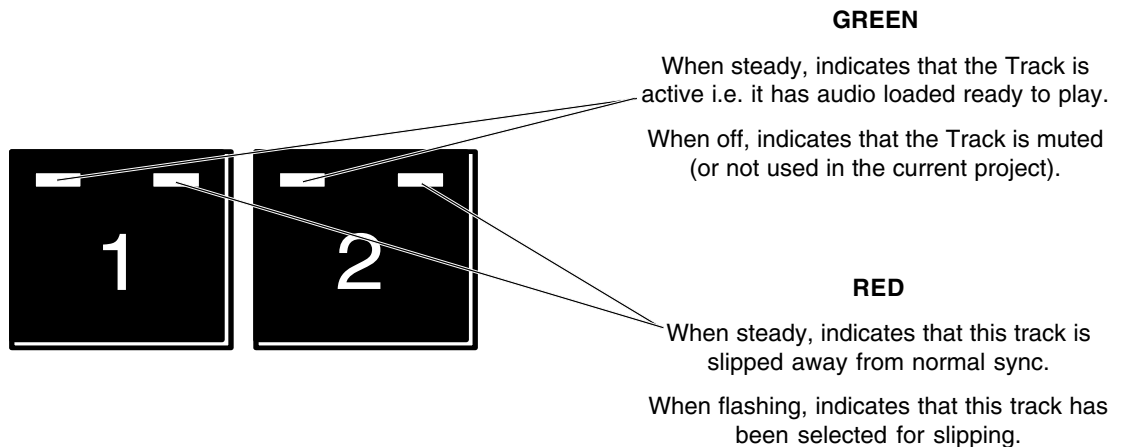
2.2.2 The Dubber Lights

The Dubber Lights are used to indicate the status of all Dubbers connected to the system.

GREEN

When steady, indicates that the Dubber is active i.e. it has an audio project loaded.

When flashing, indicates the selected Dubber.

RED

When steady, indicates that one or more tracks on the Dubber are slipped away from normal sync.

YELLOW

When steady, indicates that the Dubber is locked to time code.

When flashing, indicates that the Dubber is waiting for time code, or not yet locked and playing.

2.2.3 The Track Button Lights

The Track Button Lights are used to indicate the status of each track on the selected Dubber.

GREEN

When steady, indicates that the Track is active i.e. it has audio loaded ready to play.

When off, indicates that the Track is muted (or not used in the current project).

RED

When steady, indicates that this track is slipped away from normal sync.

When flashing, indicates that this track has been selected for slipping.

3.   Software Operation

3.1   Dubber and Track Selection

3.1.1   Dubber Selection

Usually one Dubber is selected at a time. To do this, first press the Machine Key, then press the Track key corresponding to the Dubber you want to select. The number of this Dubber is shown in the LED display, and its green light flashes.

If you want to escape from this mode before selecting a machine, press the Machine key again.

To select all Dubbers, press the Machine Key, then the ALL key. This is a special mode, and only a few operations can be carried out with all Dubbers selected. To return to having only one Dubber selected, select one in the normal way.

3.1.2   Track Selection

The Track Keys are used to mute and unmute tracks on the selected Dubber. Muted tracks have their green light unlit. Immediately after loading a project, all the tracks that are active in that project will be illuminated.

When the Slip Menu is active, the Track Keys are used to select tracks for slipping. To select a track for slipping, you must first press the Slip Menu key. Then press the desired Track key. You may select any number of tracks in turn, prior to performing an action on them. Pressing the key on an already selected track, deselects that track.

"Solo" Track Selection

You may select a single track (and only that track) by double-clicking its Track key.

Group Track Selection

You may select a contiguous series of tracks by holding down one Track key and double-pressing another. All the tracks in between will be selected. You may also select all tracks by pressing the ALL button.

Deselect All Tracks

You may deselect all tracks by holding the SHIFT key and pressing the ALL button.

3.2   Transport Control

Transport control of the Dubbers is achieved using dedicated keys on the FC-100 Controller Board. All transport commands apply only to the selected Dubber.

3.2.1 CHASE

This key toggles the selected Dubbers (or all Dubbers) in and out of chase mode. When a Dubber is in chase mode, it follows the time code at the time code input. While time code is present, and the Dubber is in chase mode, the transport controls on the Dubber console are inactive.

Chase is the only transport command which can be given to all Dubbers at the same time. (Press MACHINE ALL CHASE)

When chase mode is active, the light in the CHASE key flashes while the dubbers wait for time code. The light is solid when the machine achieves time code lock and all channels start playing. If the Chase light on any machine starts to flash, it indicates that some audio may not have played correctly. This is usually due to a problem with the hard disk such as fragmentation or very high edit density.

3.2.2   PLAY

Puts the selected Dubber into normal PLAY mode. When CHASE is on, playback will be interrupted if time code is presented to the selected Dubber. The dubber will then locate to the incoming time code and begin to play from there.

If all Dubbers are selected, the play command cannot be used.

3.2.3   Reverse PLAY

Puts the selected Dubber into Reverse PLAY mode.

3.2.4   Stop / Jog

Brings the selected Dubber to a stop from either PLAY or SHUTTLE modes. The Jogger Wheel can now be used to scrub the audio on the selected Dubber.

Holding down the Shift key while turning the Jogger Wheel causes scrubbing at exactly play speed, forwards or backwards.

When Chase is on, scrubbing will be interrupted if time code is presented to the selected Dubber.

3.2.5   Fast Forward

Puts the selected Dubber into fast forward at twice play speed. If the Fast Forward key is pressed again the speed doubles, and it will continue to do so with repeated pressing of the key, up to 128 times play speed.

When CHASE is on, fast forward will be interrupted if time code starts feeding the selected Dubber.

3.2.6   Rewind

Puts the selected Dubber into rewind at twice play speed. If the Rewind key is pressed again the speed doubles, and it will continue to do so with repeated pressing of the key, up to 128 times play speed.

When Chase is on, rewind will be interrupted if time code is presented to the selected Dubber.

3.2.7   Locate

To locate a Dubber, type the time code or film footage on the Numeric Keypad. It will replace the TC Display number at the upper right of the LCD screen. Now press STOP to locate the selected Dubber to that location. Alternatively you may press PLAY to locate to the new position and start playing.

When typing in a time code number, the last digit(s) may be removed by pressing the Rub Out key. To remove all digits press SHIFT + RUB OUT. When all digits have been removed, the original TC Display value returns to the screen and the operation is cancelled.

3.3   Loading and Unloading Files

A Dubber must be loaded with a Project created on an MFX3^plus, Pro Tools, or Akai DD^plus workstation before it can produce audio.
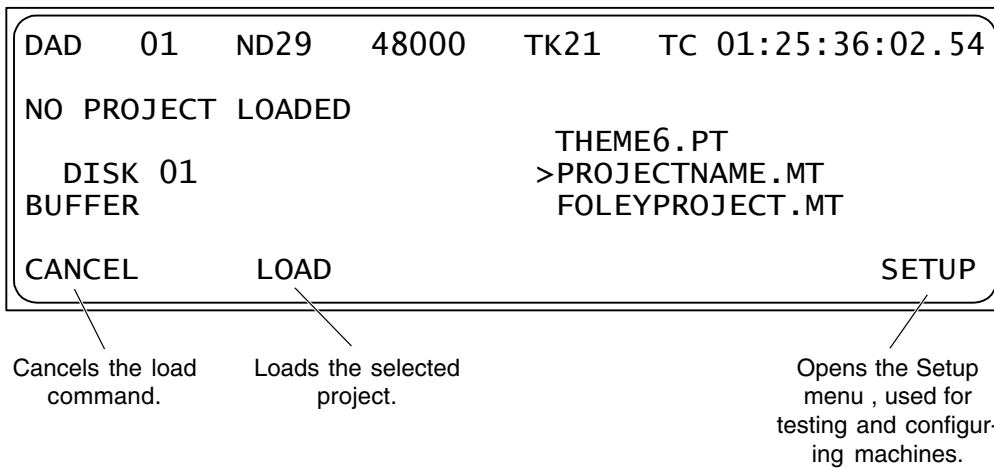
3.3.1   The Title Menu

The Title Menu provides file handling commands which work on the selected Dubber and its attached storage devices.

3.3.2   The Load Sequence

The right hand side of the LCD screen changes to show a list of all projects on the hard disk, which can be scrolled through using the + and - keys. The LED in the load Soft Key flashes.
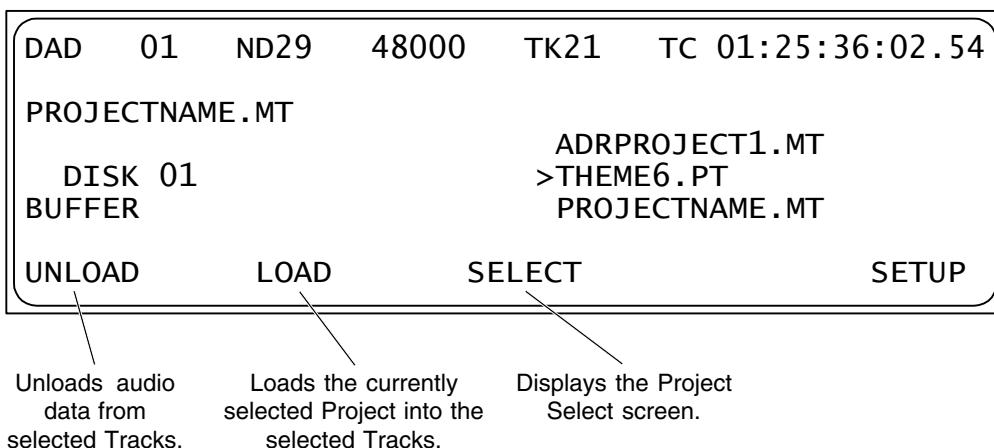
Scroll the project list until the desired project is situated in the centre of the display, then press the ENTER Key.

```
┌─────────────────────────────────────────────────────┐
│ DAD    01   ND29    48000    TK21   TC 01:25:36:02.54│
│                                                       │
│ NO PROJECT LOADED                                     │
│                                    THEME6.PT          │
│   DISK 01                        >PROJECTNAME.MT      │
│ BUFFER                            FOLEYPROJECT.MT     │
│                                                       │
│ CANCEL        LOAD                            SETUP   │
└─────────────────────────────────────────────────────┘
```

Cancels the load command.   Loads the selected project.   Opens the Setup menu , used for testing and configuring machines.

3.3.3   Multi-Project Load (MPL)

To load multiple disparate projects from either the same or different disks, load a project using the method described in 3.3.2 The Load Sequence, then press the LOAD key again. Tracks not used by the first project have their green LED lights lit ready for loading the next project.

Multi-Project Load allows you to select the tracks into which you load additional projects. To load an eight track project into tracks nine to sixteen, hold down Track Key 9 and double click Track Key 16. The green LED indicators for these tracks will now be lit. If material from a previous load is already loaded into these tracks, this will be replaced by the new material. Now use the +/- keys to select the desired project and press ENTER. Repeat this process until all tracks have been loaded with project material.

```
┌─────────────────────────────────────────────────────┐
│ DAD    01   ND29    48000    TK21   TC 01:25:36:02.54│
│                                                       │
│ PROJECTNAME.MT                                        │
│                                    ADRPROJECT1.MT     │
│   DISK 01                        >THEME6.PT           │
│ BUFFER                            PROJECTNAME.MT      │
│                                                       │
│ UNLOAD        LOAD        SELECT              SETUP   │
└─────────────────────────────────────────────────────┘
```

Unloads audio data from selected Tracks.   Loads the currently selected Project into the selected Tracks.   Displays the Project Select screen.

3.3.4 The MPL Project Select Screen

This screen allows the user to toggle through the various projects loaded into the dubber in a Multi-Project Load session and check the tracks for audio clips that may be missing from the project, or that are corrupted. It also displays other information pertaining to the projects and allows the user to unload a particular project if needed.

Example: Load the first eight tracks of two projects into tracks 1 to 8 and then 9 to 16 of the dubber respectively. To check the validity of audio on the second track of Project 2 in a Multi-Project Load session, from the Title Screen, press the SELECT button. The first project will be displayed. Then press NEXT. The screen will now display the second project loaded, and the track lights for the Dubber tracks that contain this project will be lit. Now press the second track key for this project (Track 10), if the audio on this track has loaded successfully, the screen will show "TRACK 10 (02) IS OK" as in the illustration below.

MPL Project Number.
Number of tracks from this project currently loaded.
Number of tracks this project contains on disk.
The Disk Number from which this project was loaded.
Location of the first clip in this project.

```
DAD   01   ND29   48000   TK21   TC 01:25:36:02.54
PRJ   02   TK08   AVL16   DK02   PP 01:25:36:02.54
PROJECTNAME.MT

TRACK   10   (02)   IS   OK


UNLOAD        LOAD        NEXT              SETUP
```

Track Status

Press to proceed to display the next project.

Notes:

If a 9 track project is being loaded, but only eight tracks are selected, only the first eight tracks of that project will be loaded.

If a project has blank tracks, DaD^plus' Multi-Project Load function will automatically skip the blank tracks and bring all used tracks together so that they appear on the DaD^plus as consecutive tracks.

If the various projects loaded have different frame rates, the frame rate of the first project loaded will be used by the DaD^plus. This can be changed later, if required, in the SYNC menu.

Only projects with the same sample rate as the first project loaded can be added to a Multi-Project Load session.

Projects from MFX3^plus, Pro Tools™ and Akai™ can be mixed freely within a Multi-Project Load session.

To replace all loaded tracks with a new set of projects, click LOAD than ALL..

3.4   Slipping

Slipping advances or retards tracks compared to the time code source. Just as with synchroniser offsets:

Positive numbers represent **advances** (tracks playing earlier).
Negative numbers represent **retards** (tracks playing later).

```
DAD   01   ND29   48000   TK21   TC 01:25:36:02.54

PROJECTNAME.MT
                          OFFSET    00:00:00:00.00
 TRACK 02                 SLIP      00:00:00:00.00


CLEAR       RESTORE    OFFSET    CAPTURE
```

3.4.1 Tracks

Each track can be slipped individually, by frames or by smaller increments. Multiple tracks can be slipped together by selecting them before changing the value.

Slippage.

To change slippage on a single track, press the SLIP key (if not already lit), then select the track.

The red SLIP light on the selected Track key starts flashing. You may now use the + and - keys to slip the selected track by frames. If you wish to slip by a finer amount, hold down the Shift key at the same time. The track will now be slipped by perforations (quarter frames) if the displayed time units are feet and frames, or by 5 subframes (one-sixteenth of a frame) if the units are in time code format.

The Jogger Wheel can also be used to slip the selected track. If the transport is stopped the track is heard scrubbing while you turn the Jogger Wheel. This can be used to locate a required sound on the track so it can be placed in sync with the current TC Display value.

Slipping using the Jogger Wheel or + and - keys occurs immediately, even if the Dubbers are chasing time code, so you can hear the results as you change the setting (this may be used to phase tracks if required). When you have finished adjusting the amount of slip, press the Track key again to set the slip active. The red Slip light will now stop flashing, but will remain lit solid if you have left the track at a non-zero slip.

Slipping Multiple Tracks

At any time the Slip key is lit, you may select any number of tracks. When more than one track is selected the display shows "MULTI" next to the track number. The slippage on all the selected tracks changes at the same time.

If the tracks you selected have different slip amounts when you begin, the **relative differences** will remain while you change them.

```
┌─────────────────────────────────────────────────┐
│ DAD   01   ND29   48000    TK21    TC 01:25:36:02.54 │
│                                                      │
│ PROJECTNAME.MT                                       │
│                          OFFSET     00:00:00:00.00   │
│  TRACK MULTI             CHANGE     00:00:00:00.00   │
│                                                      │
│                                                      │
│ CLEAR       RESTORE     OFFSET    CAPTURE            │
└─────────────────────────────────────────────────┘
```

Numerical Slippage

Slip values can also be entered numerically. After pressing the Slip key (even if you have already used the Jogger Wheel or + and - keys) use the Numeric Keypad to enter a slip value in either feet and frames or time code format. This number appears below the track slippage.

```
┌─────────────────────────────────────────────────┐
│ DAD   01   ND29   48000    TK21    TC 01:25:36:02.54 │
│                                                      │
│ PROJECTNAME.MT                                       │
│                          OFFSET     00:00:00:00.00   │
│  TRACK MULTI               SLIP     00:00:00:00.00   │
│                            ENTRY    00:00:00:20.00   │
│                                                      │
│ CLEAR       RESTORE     OFFSET    CAPTURE            │
└─────────────────────────────────────────────────┘
```

Press **ENTER** to make the entry the **ABSOLUTE** slippage of the selected track(s).
> Example: 5<ENTER> causes slip to read 5.

Press **SHIFT-ENTER** to make the entry into **MINUS** the **ABSOLUTE** slippage of the selected track(s).
> Example: 5<SHIFT-ENTER> causes slip to read -5.

Press the **PLUS** (+) key , to add the entry to the existing slip for the selected track(s).
> Example 5<PLUS> causes slip to increase by 5

Press the **MINUS** (-) key, to subtract the entry from the existing slip for the selected track(s).
> Example 5<MINUS> causes slip to decrease by 5.

The PLUS and MINUS keys can be pressed repeatedly, using the same entry many times. To remove the slip value entered, press <SHIFT-RUB OUT>.

Correcting Mistakes

If you make a mistake while typing a number, use the RUB OUT key to remove the last number(s), then type correct ones in their place. The entire number can be removed by pressing <SHIFT-RUB OUT>.

Clear Slippage

To clear slippage from the selected tracks press the CLEAR Soft key. Or enter ZERO into the Numeric Keypad and press ENTER.

Restore Previous Setting

To go back to the previous slip setting , press the RESTORE Soft Key.

3.4.2 Dubbers

It is possible to slip a whole Dubber, as well as individual tracks. This is an offset for the whole machine.

To slip a Dubber, first select it, then press the OFFSET Soft Key.

Now use the same controls to slip the Dubber as described above for slipping tracks. Press the OFFSET Soft Key again to deselect it and store the slippage you have entered.

It is possible to slip all Dubbers at the same time. Select all Dubbers by pressing the MACH key and then ALL, then operate the slip functions as described above. In this mode, it is not possible to select tracks.

3.4.3 Capturing Offsets

It is possible to set the slip value for a group of tracks or a Dubber by capturing its current position.

Stop the incoming time code at the new position for the audio to be slipped. You can also enter this location by typing it into the numeric keypad and pressing ENTER.

Select the tracks you wish to slip by pressing the corresponding Track keys. Press ALL to select all tracks, or choose OFFSET to slip the selected Dubber.

Press the CAPTURE key.

Enter the absolute time code value of the audio to be slipped on the numeric keypad or by using the jog wheel. Remember to press ENTER when you've finished.

Press the CAPTURE soft key again to set the slip value.

To clear the slip settings, select the desired tracks, press the CAPTURE soft key, then press the CLEAR soft key.
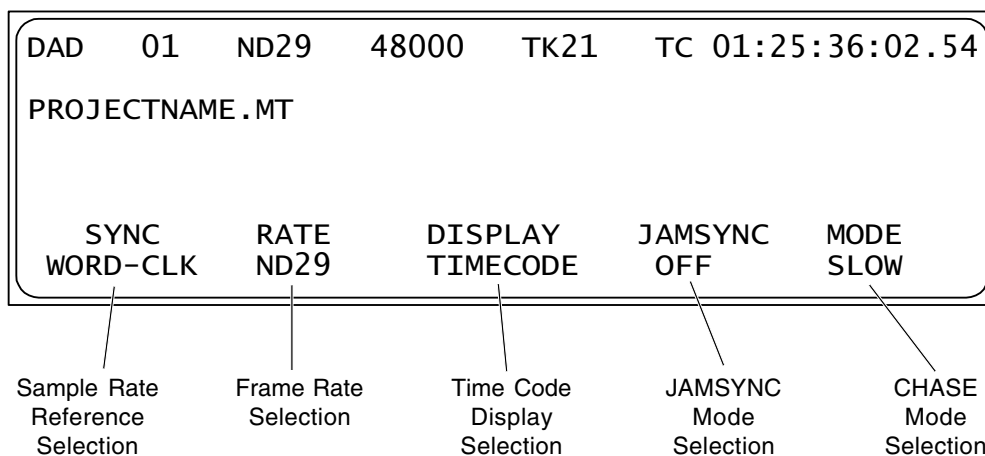
3.5   Synchronisation

The DaD^{plus} can chase time code, and can lock its sample clocks to a variety of external reference sources. These are selected on the Sync Menu.

3.5.1   The Chase Key

The Chase key is used to place a Dubber (or all Dubbers) in sync with time code. When in Chase Mode, a Dubber is always ready to respond to time code entering its input port. When there is no time code entering the port, the normal transport controls can be used to play, shuttle or jog a selected Dubber, but as soon as the time code starts, the Dubber jumps immediately into sync, ignoring all further transport commands. When the Chase key is turned off for a Dubber it ignores time code input and follows local transport commands.

3.5.2   The Sync Menu

```
┌─────────────────────────────────────────────────────────┐
│  DAD    01    ND29    48000    TK21    TC 01:25:36:02.54 │
│                                                          │
│  PROJECTNAME.MT                                          │
│                                                          │
│                                                          │
│      SYNC          RATE      DISPLAY    JAMSYNC    MODE   │
│   WORD-CLK         ND29     TIMECODE      OFF      SLOW   │
└─────────────────────────────────────────────────────────┘
```

| Sample Rate Reference Selection | Frame Rate Selection | Time Code Display Selection | JAMSYNC Mode Selection | CHASE Mode Selection |

SYNC (Timing Reference Selection) - This soft key allows selection of the timing reference for the digital master clock. Press to change the reference signal shown in the lower line, pressing enough times to cycle around to the desired choice. Choices are - VIDEO, WORD-CLK (digital word clock). SUPR-CLK (256 X sample rate clock) or INTERNAL (internal crystal sync).

RATE (Frame Rate Selection) - Press this soft key to change the "expected" frame rate and format for incoming time code. It is possible to "pull up" or "pull down" the play speed of the machine by setting the frame rate at say 29.97 but actually providing time code at 30 frames per second. (This causes a 0.1% increase in sample rate). If the wrong frame rate is selected, the display will report "TIME CODE TRACKING", and will not run at the correct speed. The available choices for this menu are - MP24 Motion Picture 24 fps, EB25 European Broadcast 25 fps, DF29 DropFrame 30 fps pull-down compensated, ND29 Non Drop Frame 30 fps pull-down compensated, DF30 Drop Frame 30 fps, or ND30 Non Drop Frame 30 fps.

DISPLAY (Time Display Format) - Selects the type of timing units displayed on the LCD menus. Press repeatedly to cycle through: TIME CODE (time code in the format shown in the FRAMES field), FILM/35 (feet and frames for 35 mm film) and FILM/16 (feet and frames for 16 mm film). This choice also affects slip values when the SHIFT key is held down - for FILM, slip is in quarter frames (perforations), while for TIME CODE it is in subframes.

JAMSYNC Mode Selection - This function allows the selection of a time range over which DaD^{plus} will "jam" sync to the timing reference in the temporary absence of time code. The options for this function are: OFF - no jam sync, stop immediately time code stops; BRIEF- handle brief dropouts, fast response; NORMAL - handle dropouts, moderate response; LONG - handle dropouts up to a second, delays transport stop; or LONGER - handle exceptionally long dropouts.
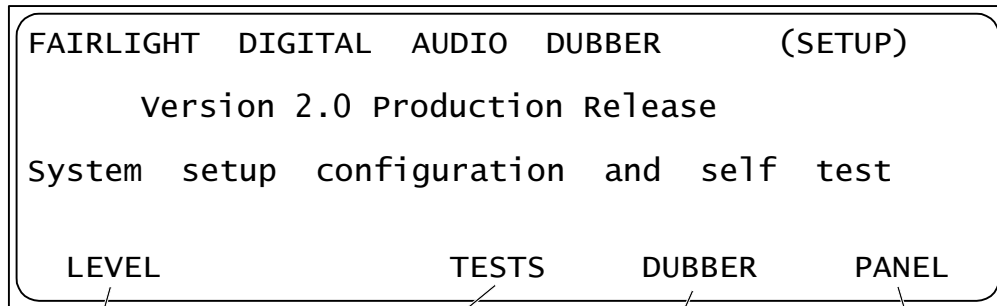
CHASE Mode Selection - The DaD^{plus}' motion ballistics are selectable so that the speed of the Dubber can be made to ramp from zero to playback and back to zero in line with projector movements on film stages. The options are: TV - assume non-linear LTC which has no ballistics, FILM - assume ballistic LTC with projector ballistics, FAST - same as FILM but with faster ballistics, SLOW - same as FILM but with slower ballistics.

4.   System Test and Configuration

4.1   The Setup Menu

Press the Soft Key under SETUP in the Title Menu, to display the Setup Menu.

The third line displays the current software version. Please take note of this number when contacting Fairlight service personnel regarding any support issues.

```
FAIRLIGHT  DIGITAL  AUDIO  DUBBER      (SETUP)

        Version 2.0 Production Release

System  setup  configuration  and  self  test


   LEVEL                TESTS       DUBBER       PANEL
```

Allows the user to reduce the ouput level of the DaDplus by 2dBu. While the DaDplus has a nonimal output level of +24dBu, this allows the ouput level to be set to +22dBu.

Opens the Tests Submenu, discussed below.

NOTE: This menu soft key will only be available when there are no projects loaded on the selected Dubber.

Shows the ID number of the selected dubber, and allows you to change it. Use the + and - keys to change the displayed number, then press the Soft Key again to adopt that number. If you try to set it to an existing numbered machine, an error will be displayed, and the number will not be changed.

Shows the number of this controller Panel, and allows you to change it. Each Dubbing system may have up to two Panels, which must be numbered differently. The Panel numbers are independent from the Dubber numbers.

4.2   The Tests Submenu

This menu is only available when the selected Dubber has no projects loaded. Please unload all projects from the selected Dubber to obtain access to this menu if unavailable.

```
SYSTEM   COMPONENT   DIAGNOSTIC          (TESTS)



Select  one  of  the  options  below  to  start
   DSP        SCSI        PANEL              EXIT
```
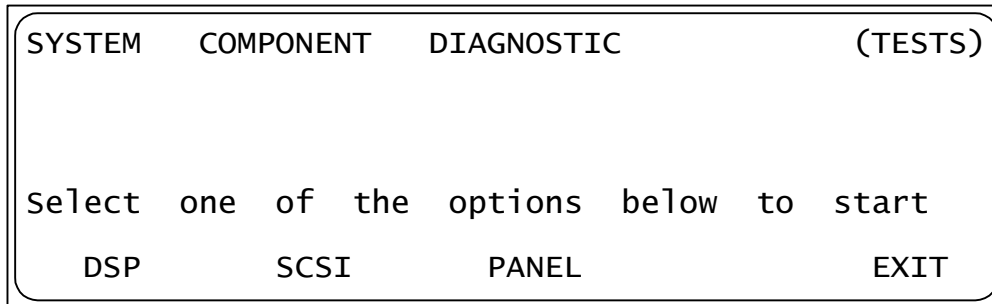
The following tests are available:

DSP - Shows the presence of each DSP card, and indicates the operation status. Cards which are shown as SICK or FAIL should be replaced. The BOOT option forces a reboot of all cards, during which a log of the operation is written to the serial port. If your system has any problems, a Fairlight technician will tell you how to extract a report from this log. This menu cannot be accessed when a project is loaded.

SCSI - Scans the SCSI bus and shows all drives, with information about their address, vendor and performance. The letter F indicates a fixed drive, while R indicates a removable. The figure under Kb/s is a worst-case seek disk speed check, which causes the disk to read data that is very widely spread across its surfaces. This is a good guide to the performance expectations of different disks used on the Dubber

(Note: To switch between synchronous SCSI mode and asynchronous SCSI mode, hold the SHIFT key when selecting the SCSI test function soft key. For optimal performance, fast SCSI drives used in synchronous SCSI mode should be used when possible.)

PANEL - All LEDs are lit, so failures can be spotted. In addition you may check the function of any switch, or the Jogger Wheel, by activating them.

5.   Preparing Projects for Export to DaD[plus]

5.1   MFX3[plus] Workstations

5.1.1   Hard Disks

The Fairlight MFX3[plus] uses two types of disk formatting, RBF, and FLFS. The DaD[plus] supports both of these formats. Disks formatted on the Fairlight MFX2 or MFX3 to the MDR-DOS format are not supported. If necessary, a disk formatted with the MDR-DOS standard can be connected to a MFX3[plus] where the project can be copied to a RBF or FLFS disk.

5.1.2   Exporting the Project.

To export a project on the MFX3[plus] for use on a DaD[plus], simply open the project on the MFX3[plus] workstation and then press the "Blue - Export" button and select "Dubber Export" soft key. To limit the range of the project, while in the Export mode, select the tracks required, and a Range with the "From" and "To" keys, and then press the "Dubber Export" soft key.

5.1.3   Special Considerations

The MFX3[plus] allows the creation of clips that play over midnight , ie: start before Timecode location 00:00:00:00 and finish after this time. This is not a legal operation for the DaD[plus] and causes problems. Select a range of clips within legal boundaries (anywhere between 00:00:00:00 and 23:59:59:29) and then export this range to the DaD[plus] if the project contains clips that play over "Midnight".

5.2   Pro Tools™ Workstations

5.2.1   Hard Disks

While Macintosh HFS disks for use with the DaD^{plus} can have more than one partition, only the first partition will be recognised by the DaD^{plus}. The project and all associated audio files must be located on the first partition.

Try to remove unnecessary files from the hard disk being used to move a Pro Tools™ project to the DaD^{plus}. The DaD^{plus} scans each file on a HFS Macintosh Disk to find files required to play the sessions, and scanning files that are not required will unnecessarily slow DaD^{plus} project loading operations.

5.2.2   Exporting the Project

When a Pro Tools™ session is created, a directory to contain the session is created containing the Session file, and two folders called Audio Files and Fade Files. Normally, all the audio files for this project are contained within these two folders. However, sometimes files required for the playback of a particular session may be located outside of these folders, or even on another hard disk. If this occurs, there is no way for the DaD^{plus} to locate and then play these files, unless they are moved to the file locations normally associated with the session. Ensure all audio and fade files are located in the appropriate directories before moving the disk to the DaD^{plus}. No other preparation is required.

5.2.3   Special Considerations

Only Pro Tools projects created on the Macintosh platform can be played on the Fairlight DaD^{plus}. Pro Tools™ projects created on the NT platform are not currently supported.

DaD^{plus} does not support Pro Tools™ level automation.

Tracks that are not assigned to a voice in Pro Tools™, but make up one of the first 24 tracks exported in a session, will play on the DaD^{plus} as if they have been assigned to a voice.

DaD^{plus} supports both 16 bit and 24 bit Pro Tools™ sessions.

HFS Disks used with the DaD^{plus} should be formatted with FWB™'s Hard Disk Toolkit versions 2.0 and above to ensure disk driver compatability and reliable operation.

5.3   Akai DDPlus™ Series

5.3.1   Hard Disks

Only hard disks created in the DDPlus™ format are supported by the Fairlight DaD^{plus}. The Akai must have the audio File Type set to AKAI->FAIRLIGHT before any audio is recorded if the projects are to be eventually played on the DaD^{plus}. This parameter is set in the RECORD MODE window of the Akai.

5.3.1   Exporting the Project

Ensure all library files are also saved to the disk being used to play on the DaD^{plus}. It's often easy to forget to transfer these when preparing a disk for playback in another location.

5.3.2   Special Considerations

Akai DD8Plus™ systems have two different 20 bit audio formats. The Fairlight DaD^{plus} only supports the 20 Bit Uncompressed system, not the 20 Bit Compressed audio. All other bit depths from Akai systems are supported.

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