



DD 8 *plus*

DL 1500

DIGITAL DUBBER

Version 3.30 Addendum

Operator's Manual

WARNING

To prevent fire or shock hazard, do not expose this appliance to rain or moisture.

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SUMMARY OF NEW FEATURES

Version 3.30 software for the DD8plus/DD16PBplus and DL1500 offers the following new features in addition to various bug fixes and improvements:

- Read only support added for Macintosh 'Extended' (HFS+) formatted disks.
- New function added to allow project notes to be created and saved with project.
- Additions to support 25fps-4% timecode chase and display options.
- Additions to allow custom User Bit information to be read from Descriptor field in B-WAV files created on Zaxcom Deva and output from LTC generator (when using IB-DXTC timecode option board).
- New function to allow original recording time of cues to be output from LTC generator for use in dailies screening applications.
- New function added to allow machine to stop playback automatically if any audio is unavailable in its buffers for playback.

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MACINTOSH HFS+ ('EXTENDED') FORMAT DISK SUPPORT

The DD8/DD16PB now includes support for read-only access of Macintosh 'Extended' format drives (sometimes referred to as HFS+). HFS+ was introduced in Mac OS8.6 to allow volumes greater than 4Gb in size to be handled more efficiently. The support for HFS+ in the DD8/DD16PB is in addition to the existing support for Macintosh 'Standard' format disks (referred to as HFS) included in previous releases of software.

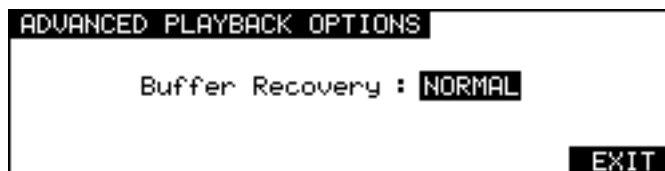
As modern drives have grown in capacity, the HFS+ format has become widely used to allow efficient use of disk space. The new support for HFS+ format drives allows the DD8plus/DD16Pbplus to load and playback Protools sessions created on these disks.

NOTE: *The support for Macintosh HFS+ ('Extended') format disks in the DD8plus/DD16Pbplus is read-only. This means that although files created on other systems (such as Protools) can be read from these disks, they can not be used for writing or recording.*

PLAYBACK BUFFER OPTIONS

A new function has been added to the DD8plus/DD16PBplus to control the action of the machine if a playback buffer has insufficient audio to sustain full playback. This may occur if an attempt is made to playback a heavily edited region of audio from a slower drive from which it is not possible to read audio data at a sufficient rate.

A new ADVANCED PLAYBACK OPTIONS page has been added to allow this function to be controlled. This page is accessed by holding down the ENTER key and pressing the PLAY mode key on the left hand side of the machine (the one under the track select keys):



The Buffer Recovery field is used to select:

- | | |
|---------------|--|
| NORMAL | The machine acts in its usual way and any playback buffers with insufficient data will automatically recover. |
| STOP ON ERROR | If there is insufficient data in a playback buffer to sustain full playback of all cues, the machine will stop and show the message "Tracks are too busy in this area to allow full playback". |

When STOP ON ERROR is selected, the DD8plus/DD16PBplus will stop immediately if any audio data is not available for playback. This can be useful during optical transfers or in other situations where it is important to know that all audio cues have been played correctly.

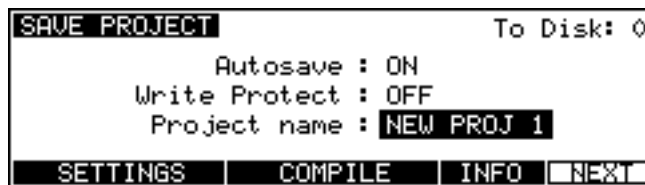
PROJECT NOTES

When used with a DL1500 remote controller, the DD8plus/DD16PBplus now allows short text notes to be stored with projects on Akai format drives. This information is intended to allow easier identification of specific project files than can be achieved using the 10 character filename.

NOTE: *Project Notes can only be created or viewed when using projects on Akai format disks.*

ENTERING PROJECT NOTES

Due to the limitations of the front panel interface on the DD8plus/DD16PBplus, project notes can only be entered or edited from the DL1500. To store new notes with the current project (or to edit any existing notes), first go to the SAVE PROJECT page on the DL1500:



Then press the INFO (F5) key which will take you to the PROJECT NOTES page. Here, you can view any notes currently saved with the project:



You can enter new information or edit the existing notes by pressing the EDIT NOTES (F5/F6) key:



This allows you to enter project notes information up to 72 characters in length. When you have finished entering your notes, press the EXECUTE key. If the AUTOSAVE function is enabled on the connected machine, the project will automatically be saved with the new notes you have entered. If the AUTOSAVE function is switched off, you will be shown a prompt asking if you want to manually save the project with the new notes.

VIEWING PROJECT NOTES

The notes information stored with any project can be viewed from the LOAD PROJECT page of either the DL1500 or DD8plus/DD16PBplus.



On the DD8plus/DD16PBplus, first go to the LOAD PROJECT page and use the DATA+/DATA- keys to select the project you are interested in. Then press the INFO (F5) key. The notes information for the selected project will then be shown in a popup window:



On the DL1500, project notes can be viewed in a similar manner. On the LOAD PROJECT page, first select the project for which you wish to view information:



Next, press the INFO (F3) key and the notes information for the selected project will be shown:



NOTE: Project Notes information will be retained correctly even if a project is later loaded and re-saved on an earlier version of software that does not support this feature.

TIMECODE OPTIONS

25FPS-4% TIMECODE RATE

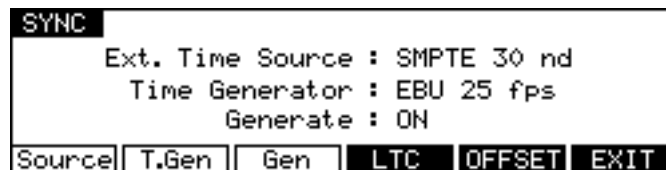
The DD8plus/DD16PBplus now includes options to support a frame rate of 25fps-4%. This option is intended for European applications where film shot at 24fps has been transferred frame-by-frame to 25fps video. During editing, the audio is referenced to the 25fps video so it is sped up by 4.166%. During mixing (with all equipment locked to the 25fps timecode), the picture source will often be a 24-speed source (such as an Avid system or the original film negative). In this situation, the audio needs to be slowed down by 4% to sync correctly.

NOTE: When the DD8plus/DD16PBplus is setup to chase external timecode with the EBU 25FPS-4% option selected, the audio playback will be interpolated so that it plays 4% slower than it normally would. As a result, it is not possible to record when this option is selected.

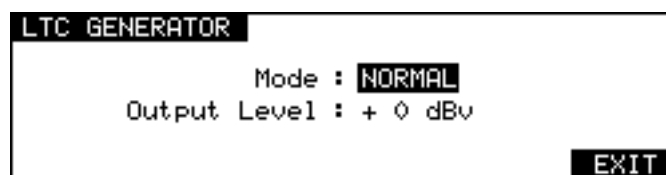
TIMECODE OUTPUT

The DD8plus/DD16PBplus now includes a new function to allow the LTC generator to output timecode based on the original time at which files were created. When this mode is enabled, the LTC generator will output timecode based on the original timestamp of cues on track 1 (i.e. at the start of each cue on track 1, the time at which it was originally recorded will be jammed into the timecode generator). This is intended for screening applications where the DD8plus/DD16PBplus can be used to replay audio directly off disk while synced to picture.

On the SYNC page, an LTC (F4) key will be available when an LTC option is selected for the TIME GENERATOR:



When the LTC (F4) key is pressed, this will take you to the LTC GENERATOR page:



The MODE field can be used to select either:

- NORMAL The LTC generator will function as normal and produce continuous timecode.
- TIMESTAMP The LTC generator will output timecode based on the original timestamp of cues on track 1.

NOTE: The new timecode output function is available when using either the IB-DXTC or the IB-802T timecode option boards.

DEVA USER BITS

The DD8plus/DD16PBplus already include support for reading and playing disks created on the Zaxcom Deva location recorder. When the DEVA is used to record B-WAV files, it stores several pieces of information within each audio file including the timecode value when it was originally recorded and the user bits information selected on the Deva. This user bit information includes the scene number (manually set by the user) and take numbers that automatically increment each time a new recording is made.

When using the IB-DXTC timecode option board, the DD8plus/DD16PBplus is now able to read the user bit information encoded in Deva B-WAV audio files and output this from the LTC generator.

This feature works in conjunction with the TIMESTAMP function described in the previous section. When the TIMESTAMP mode is selected, the LTC generator will output timecode based on the original timestamp of cues on track 1 along with the user bit information encoded in these cues.

These functions are intended to allow the DD8plus/DD16PBplus to be used for creation of 'dailies' with location audio that has been recorded on the Deva.

When used with other external equipment, this function also allows the DD8plus/DD16PBplus to be used for the automatic syncing of audio during the creation of 'dailies' from 24P high-definition video. In this application, the production material is shot on a 24P HD camera with the audio recorded separately on the Zaxcom Deva.

During production, video timecode (e.g. 30 frame) is recorded onto one of the camera's audio channels in addition to the 24 frame code recorded to its timecode track. The 30 frame timecode is also used to timestamp the recordings made on the Deva.

During creation of the 'dailies', the Deva disk can be played back on the DD8plus/DD16PBplus which is setup to chase the 30 frame code originally recorded on the camera's audio track. At the same time, the DD8 can generate LTC giving the original timestamp of the audio files along with the scene and take information encoded into the user bits. This information can be read by equipment such as an Evertz 'Afterburner' and Evertz 'Key Log Tracker' in order to produce an output in the required format along with an EDL for use during off-line editing.

NOTE: *The feature to allow User Bits from Zaxcom Deva disks to be output from the LTC generator is only available when using the IB-DXTC timecode option board.*

OTHER CHANGES

*Fix bug which caused hangup (GP error) if an attempt was made to load a Waveframe project containing more than 16 tracks.

- Changes to automatically switch sample clock to internal during certain functions that require transferring audio through the system's wave memory (such as disk copy, backup etc). This prevents any glitches or corruption of the audio being transferred if the sample clock is disrupted (e.g. if an external clock source is removed).

- Fix bug on DL1500 which prevented correct calculation of footage display time on VGA screen if the ZERO AT parameter was non-zero. The footage display on the DL1500 will now be the same as on the DD8 (i.e. only the MARK time is used to determine zero footage).