Numark D² Director

Firmware Update v1.09 2008-02-11

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Installation

D² Director features a failsafe upgrade procedure. Should an upgrade fail part way through for any reason (including loss of power) the upgrade process should be restarted from the beginning. However, for your convenience we recommend that you take care to ensure that power is not interrupted until the process is complete.

1. Download the firmware upgrade and the latest release of Librarian to your computer. These are packaged in the file D2_v1_09_Update.zip. You must extract the files from the zip.

2. Copy the D2_v1_09.upg file to the top level of a FAT formatted USB storage device. You should erase any earlier .upg files from the device. Take care to copy the .**upg** file and not the .zip!

3. With the D² Director powered off, connect the USB device to any USB port.

4. Remove any other connected storage devices.

5. With the DC power jack connected, press and hold the power button until you see the message "Waiting for Media" on screen. This will take about four seconds, after which you can release the power button. If the unit does not display this message switch off and try again, taking care not to release the power button too early.

6. After a few seconds, provided D² Director is able to locate the upgrade file, the message "Any key updates to version ..." will be displayed. The version of the firmware upgrade is indicated.

1. Press one of the player buttons, for example one of the menu buttons.

7. The firmware upgrade will be loaded, a process which can take up to about a minute. After several seconds a progress indicator will be shown to give you an idea of the work remaining.

8. Once the update procedure has completed a message will confirm successful loading. Select OK and the unit will switch off.

9. If you haven't already done so, now install Librarian v1.50 to your PC or Mac. Select the appropriate installer from the Librarian folder: NumarkLibrarian_v1_50_Mac.dmg for Macintosh or NumarkLibrarian_v1_50_PC.exe for Windows.

10. Run the Librarian program and rebuild the libraries on your music devices. Please refer to the release notes below.

What's New in v1.09

Implemented support for USB CD/DVD drives, for playback of audio CDs and data CDs/DVDs. When inserted, discs appear as volumes in the Library and tracks can be sent to a deck or the crate as if from a hard disk. To send an entire audio CD to the crate, use the Library Album browser and press To Crate at album level. For data discs the Librarian "build in folder" feature can be used to build a library on hard disk before burning the tracks and .library folder to CD or DVD. Simultaneous playback of two tracks from the same CD or DVD is not recommended.

Substantial improvements to Library Search performance. Search results are now returned within a few seconds even for libraries with tens of thousands of tracks. The data necessary to support this is prepared during a library build by Librarian. It is necessary to update earlier libraries before they can be used with this firmware, and it should be noted that the Search feature is no longer available for libraries built on the player.

Implemented silence removal for continuous playback modes. Consecutive tracks will now play back to back without a gap. This eliminates the moment of silence inserted at the start and end of tracks by many MP3 and AAC encoders, allowing for uninterrupted playback of continuous mix albums. Silence parameters are calculated by Librarian during BPM and Profile generation, or on the product the first time a track is played. It is recommended to use Librarian to update the library to ensure gapless playback in all circumstances.

Library Search and Crate lists now display additional columns of information to help identify each track. The crate shows title, artist and duration while search lists show the field appropriate to the current search criteria.

Tags starting "The " are now sorted by the first character of the next word, for example "The Beatles" and "Beatles" will be recognized as equivalent and sorted under "B".

Implemented Repeat play mode. This repeats the track on deck continuously, and is enabled from each Mode window.

Pitch adjustment is now shown to two decimal places for 6%, 12% and 25% ranges. The pitch slider has always been processed to this level of accuracy, but previously the display was rounded to one decimal place.

Added support for implied decimal BPM tags, written by some DJ applications. BPM values >1000 are divided by 100 on import.

Tracks with no stored BPM no longer appear as "?" in the Library BPM browser.

The iPod database importer no longer stores zero in empty BPM and year tags.

Now only the Automatic play mode causes the next track to load if paused before (but near) the end of the track. Continuous and cyclic modes only proceed to the next track if the previous tracks has played fully to the end.

Ctrl-Left and Ctrl-Right presses in the Library Search window are now consistent with other windows.

Changes to the pitch range in the Mode window now take effect when the window closes rather than immediately.

The number of tracks in the crate are now displayed in the title bar.

Option selection controls no longer wrap around at each end.

The time code display is now completely smooth.

The default screen brightness after restoring factory settings is now maximum.

Fixed a stability issue with HFS+ formatted devices.

The letter picker now also works for BPM ranges in the Library BPM browser.

The keyboard arrow keys now navigate through tracks in the Info window.

Fixed an issue whereby a multi-partition drive with a different volume_name.txt file on each partition resulted in incorrect Library operation.

Track listings under "All" and "Unknown" are now correctly ordered alphabetically.

Improved Letter Picker performance on large volumes.

Improved performance sending tracks to a deck or to the crate from the Library File browser.

Fixed various stability issues with the Library Playlists browser.

When both decks are in cyclic play mode, and both tracks end at almost the same instant, the next track will no longer be loaded onto both decks.

Long filenames and paths now properly truncate in the the Info window.

Ejecting an iPod during a library build now works every time.

Exiting the Info window by pressing Library now works correctly.

Cascading hubs (i.e. hubs connected to hubs) are now supported. This is primarily to support devices with internal hubs which may be connected to an external hub, however it is still recommended in general to avoid cascading external hubs.

Fixed stability issues with the Crate on fast repetitive operations such as rapidly removing tracks, or playing a series of very short tracks in cyclic mode.

Fixed stability issues with the Library, in particular a rare crash when sending a track to a deck.

Optimized the AAC decoder for improved product performance when playing M4A tracks.

Improved AAC (M4A) decoder robustness.

Improved WAV decoder robustness when playing truncated tracks.

Improved detection and rejection of invalid files such as Apple Lossless files within an M4A container. These will not now be imported into the library.

Improved disk spin down prevention, so most (if not all) hard drives will no longer spin down after a period of inactivity. This prevents potential breakup of audio when playing back during spin up.

The Keylock setting is now stored across power cycles.

Improved tolerance of badly corrupted file systems which previously resulted in product instability.

Removed "cleaning" library import stage from the product. The importer will no longer take (a long) time during an update to check for tracks that have been removed. If you attempt to play a removed track nothing bad will happen. The cleaning stage is now an option within Librarian.

Changed the way seek tables and track profiles are stored on disk, saving a large amount of disk space on large volumes and improving track loading performance.

Pressing View while a popup is open no longer causes the view to cycle even though it is not visible.

The Library BPM browser list no longer regenerates every time a track is sent to a deck, unless a BPM tag is updated by the Beatkeeper in the interim.

New searches now make the search list cursor revert to the top of the list.

Tracks with leading or trailing spaces in a tag now sort into the correct order in browser lists.

The ID3v1 tag parser is now more robust against tags incorrectly padded with spaces rather than Nulls.

Devices are now correctly ejected during the power down sequence, eliminating a problem with HFS+ file systems becoming read only until connected to a Mac.

Improved performance scrolling through tracks from the Track Info window.

Implemented more detailed progress reporting during library import.

What's New in v1.08

Fixed an issue whereby button presses would occasionally operate an unrelated function.

Fixed the sort order for "All" lists in the Library.

What's New in v1.07

Implemented Key Lock. This feature causes the pitch fader to adjust the speed of the track while maintaining the key. Switch it on or off from the Mode window for each deck, or press and hold the appropriate Pitch Range button. Note that the key will be locked at the current pitch setting – if you want the original pitch set the fader to the center position before enabling Key Lock. If there is a shift applied to the deck when Key Lock is disengaged, the Key Lock icon will blink. The shift resets when the track changes.

Reorganized the mode window into two pages, with pitch and key lock on the first page and everything else on the second.

Added Latin-1 characters to the font, which includes most European international characters. European and other special characters now sort into the appropriate order for their base character (see the list below).

European and other special characters now fold together in lists. In other words, Björk and Bjork are considered interchangeable and will appear once only in a list, with the superset of their albums and tracks under that entry.

Search results now match international characters to their base character. For example, searching for artist Björk will return tracks by Björk, Bjork, Bjôrk and bjork. This also works for certain special characters which cannot easily be typed into the search field.

The full equivalence list for sorting and searching is as follows:

- À, Á, Â, Ã, Ä, Å, à, á, â, ã, ä, å are treated as A
- Ç and ç are treated as C
- È, É, Ê, Ë, è, é, ê, ë are treated as E
- Ì, Í, Î, Ï, ì, í, î, ï are treated as I
- Ò, Ó, Ô, Õ, Ö, Ø, ò, ó, ô, õ, ö, ø are treated as O
- Ù, Ú, Û, Ü, ù, ú, û, ü are treated as U
- ß is treated as S
- ¢ £ € ¤ ¥ are treated as $
- © is treated as (C)
- « » are treated as "
- µ is treated as u
- · is treated as .
- ¡ is treated as !
- ¿ is treated as ?
- Æ æ are treated as AE
- Œ œ are treated as OE
- Đ ð are treated as DH
- Þ þ are treated as TH
- ß is treated as SS
- × is treated as *
- ÷ is treated as /

The BeatKeeper now saves the beat and phase information for a track to the library so next time the track is played the beat is shown immediately.

Librarian will now calculate BPM values for tracks if you select the Build Profiles option. If you want to calculate BPM values for tracks which already have profiles, you must select the *Force Total Rebuild* and *Build Profiles* options. This could take several hours for a large library and playlists created using the unit will be lost.

When editing a text field, pressing Esc on the keyboard will now cancel the changes and restore the original value.

When building a library on an iPod, the iTunes database is now parsed instead of visiting every track on the device. This makes import much faster for an iPod than previously.

iTunes playlists are now imported from the iPod database. These can be identified by the tag [iTunes] in front of their title.

Track fields with no data are now shown as blank instead of "Unknown".

The player now starts up in Library view instead of Crate.

Re-ordering tracks in the crate or in a playlist is now much faster.

Fixed an issue whereby an unnecessary extra search would be performed after switching library.

Changed the default search from "All" to "Title" (which is much faster to execute).

The "Unknown" lists under Artist, Album etc now populate with the content you would expect.

Hitting Enter on the keyboard now drills out of, as well as into, the Track Details window.

Fixed an issue whereby the player would occasionally fail to detect that a device had been disconnected (without ejecting), leading to stability issues if the same device was reinserted.

Search results can now be navigated from the Track Details window, as with other lists.
Tweaked the device mounter so that USB keys with slightly suspect firmware now have a more useful identifier than "?".

Fixed an issue whereby, in rare circumstances, audio could drop out at the start of a loop.
Playlists are no longer duplicated in the Library when modified on the PC.

Added time markers to the profile view, and tweaked the mechanism for activating a track for phrase navigation.

The unit no longer crashes when a device is disconnected while the Library is accessing it.

The UI now remains responsive while sending a large list of tracks to the crate.

Added a shuffle feature to the crate. Each time shuffle is pressed the running order will be randomly reset. If you don't like the new order, simply hit shuffle again.

Fixed an instability with recently created HFS+ volumes.

Releases 1.04 – 1.06 were internal or limited distribution.
Changes are rolled into the 1.07 notes above.

What Was New in v1.03

Fixed an issue where tracks with invalid frame lengths would be rejected as invalid and not play back. This caused many otherwise playable tracks to become unplayable. The player and Librarian both now handle tracks with this problem and only seriously damaged tracks are rejected.

What Was New in v1.02

Start up time has been improved by about four seconds.

The library internal format has changed in this release. If an older format library is connected the player will offer to update it to the new format. A new Librarian release is available now and can also update your old libraries (this is the fastest option).

Implemented better USB flash memory key support, especially for old, slow or unreliable devices.

Implemented instant start for tracks with silent or near-silent lead-ins. As with Numark CD players, such tracks now automatically cue to the start of the audio passage when loaded to a deck. You can search or freewheel back into the silent passage if you wish to do so.

Improved scratch behavior so the time code no longer creeps forward while scratching during playback.

The file browser is now much faster and no longer causes playback to glitch while navigating large folders.

Implemented a letter picker for navigating large lists in the Library more quickly. Press and rotate (while holding in) the rotary control to bring up the letter picker - each click moves by one initial letter at a time. Only letters actually used in the list will appear. When the control is released the list jumps to the first entry with the selected initial letter. It takes a few seconds to index a very large list so if you see the stopwatch icon wait a moment and try again.

Various beatkeeper improvements:
- Improved BPM detection accuracy
- Beatkeeper indicator now correctly tracks looping/scratching
- Fixed problem with occasionally skipping a beat
- Tap can now be used immediately the track starts
- Tap now works while looping

In Library track lists, pressing the rotary control now invokes the Info function. Pressing again within Info is now equivalent to Back.

Re-implemented the Library BPM browser to be more like that of the Numark HDX. This offers a more useful range of BPMs to choose from, and then opens a list of all tracks sorted by BPM with the highlight at the first track within the selected range. The BPM of each track is included as a column in the list.

The Crate now has a Swap function for each deck. It swaps the highlighted track with the track on the selected deck. This function has replaced Pull on the first page of the Crate menu - Pull can now be found on the second page.

The current item in a list now remains highlighted even when the focus is on another control, such as the criteria field in the Library search window.

The Library search text entry field is now cleared when starting a new search.

If a Library search yields no results, this is now indicated on screen.

The previous search string is now cleared when re-entering the Library search control.

Changing the Library search field before the previous search completes no longer causes a system error.

The highlighted item in a list now shows a right arrow if it can be selected to open a sub-list.

Added icons to each desk display to indicate the current play mode (automatic, continuous and cyclic). No icon is shown if the play mode is set to manual.

The automatic play modes (automatic, continuous and cyclic) will now advance to the next track when pause is pressed after playing through at least 75% of the current track. It is no longer necessary to also be within 20 seconds of the end.

When entering text using the rotary control, the next character is now previewed at the right side of the text box. This is to eliminate confusion over which characters have been entered already.

When connecting multiple devices at the same time (or powering on with multiple devices connected) the various library notification windows now appear in a sensible order.

The track progress bar no longer jumps by a pixel when a track is loaded.

The library builder no longer attempts to import tracks from the Mac .trashes folder.

The library builder now correctly identifies that a library built by Librarian is up to date and does not attempt to re-import all the tracks.

Tracks with invalid genre tags can now be properly imported into the library. Previously these tracks

were listed by filename instead of title (which looked very odd if they were from an iPod). AppleDouble files are no longer imported into the Library.

Added graphics to the pitch fader calibration screen to make it clearer which direction to move the faders at each step.

Spinning the jog wheel very fast in search mode no longer causes the deck to start searching backwards.

Added the USB port number to Track Info.

The folder has been split out from the filename in Track Info so files nested deep in the file system can be quickly identified.

Adding a track or tracks to the crate no longer causes the UI to pause for a moment.

The Apple iPod® now correctly exits from "Do not disconnect" mode after ejection.

Fixed a problem where a deck could sometimes not start playback after attempting to search within the track during seek table generation.

Fixed a problem where spinning the jog wheel on an empty deck could cause a system error.

Fixed a problem where confirming the ejection of a device with tracks in the crate after having pulled out the device could cause a system error.

The keyboard arrows keys can now be used to reorder tracks in a playlist or in the crate. To activate re-ordering from the keyboard simply press Return (the key equivalent of PUSH SELECT).

Removed the meaningless "Add Playlist" option from the Library search menu while using the text entry field.

Improved the performance of Clear Crate.

Improved the performance of browsing through long lists.

At power down the display now fades out nicely.

End of Release Note.