

Lake Software Release notes

Thank you for choosing a Lake product for your sound reinforcement needs. Please read these notes to become familiar with the contents and currently known issues of this release. We hope you are thrilled to update to this release to get hold of the features added and issues corrected.

Contact

For technical support please use:

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For further details regarding operation, please refer to the appropriate manual included in this release.

Homepage

For latest information and new releases please visit:

www.lakeprocessing.com

www.labgruppen.com/support/software_firmware/

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Release v5.7 build 010 – 2011-06-01

Latest news

New levels of functionality is provided as PLM Series products now support a new FIR module type that utilizes a combination of FIR and IIR technology. The FIR module, among other benefits, is capable of supporting EAW Focusing through the direct recall of EAW greybox files into any PLM Series device via the Lake Controller software.

This latest version of Lake Controller also brings a raft of other benefits including general speed improvements for Windows 7, multi-core processors and high resolution screens as well as faster synchronization between Lake Controller and devices on the network. LM 26 users also benefit from critical improvements to Dante routing, synchronization and general stability.

Please read through these release notes to be familiar with the new features and other improvements that have been done in this release.

Important notes

Just as with the v5.6 release, if it is desired to go back to a release with PLM Series firmware of 2.69 or older (any v5.5 or previous), you must use the intermediate downgrade bundle (PLM firmware 2.75) supplied for this purpose. It is possible to downgrade to the v5.6 release (PLM Series firmware 2.78) without using intermediate downgrade bundle. If this is desired please see PLM Series downgrade section further down this document.

Software and firmware components in this installer

Component	Version	New	Comment
Installer	37	X	
Lake Controller	v5.7 build 010	X	
PLM Series Firmware	Bundle 00.02.91	X	
<i>DSP</i>	00.02.91	X	
<i>FPGA</i>	41		
<i>Front</i>	1.6.0		
<i>Amp</i>	0.14.2, PSU	X	
<i>Dante</i>	2.2.13		
PLM Series downgrade bundle	Bundle 00.02.75		Intermediate bundle for downgrade between this release and previous releases, please see separate instruction section.
PLM Safe Mode Image	0.03 (labeled 99.03)		See installation instructions section.
LM 26 Firmware	Bundle 00.00.37	X	
<i>DSP</i>	0.37	X	
<i>FPGA</i>	86	X	
<i>Front</i>	1.0.3		
<i>Dante</i>	2.2.14	X	
LM Safe Mode Image	0.02 (labeled 99.02)		See installation instructions section.
<i>Legacy Product Firmware</i>			
Dolby Lake Processor	1.50.53		Received from Dolby
Lake Contour	4.16.34		Received from Dolby
Lake Mesa	4.21.28		Received from Dolby
<i>Firmware Update Utilities</i>			
Lake (PLM Series and LM 26)	2.0.0.9	X	
Dolby Lake Processor	2.0.0.3		
Lake Contour	1.0.0.8		
Mesa	1.0.0.8		
<i>Preset Manager Utilities</i>			
PLM Series	1.0.93.0	X	
LM 26	1.0.90.4	X	
Dolby Lake Processor	1.0.72.0		
Lake Contour	1.0.72.0		
Mesa	1.0.72.0		
LoadLibrary™	2.6	X	See separate release note.
Bonjour	2.0.2.0		Received from Apple Inc.
<i>Documentation operation</i>			
Lake Controller Operation Man	1.2.8	X	
PLM Operation Manual	1.2.3		
LM 26 Operation Manual	1.2.3		

Compatibility

1. This release requires that the PLM firmware is upgraded to the included versions (listed above). Upgrade with the corresponding Firmware update utility.
 - a. The included LM 26, DLP, Contour, MESA firmware bundles are also compatible with the v5.5 and v5.6 release. The PLM firmware is not allowed to be used with any other Lake Controller.
2. Downgrade PLM Series firmware is possible with the included PLM Series downgrade bundle 2.75. See section “PLM Series firmware downgrade from firmware 2.78 instructions”.

DLM – Direct Lake Messaging (3rd party protocol)

The firmware bundles of this release are compatible with the functionality of at least DLM protocol v2.8.

Installation

This release suggests installation to a new Lake Controller folder; it is recommended to install this release in parallel to any previously installed version. Note, the “migration” functionality of system files is now removed.

Acronyms

[PLM]	refers to PLM Series bundle
[LM]	refers to LM 26 bundle
[LC]	refers to the Lake Controller
[PM]	refers to the Preset Manager
[Updater]	refers to the Lake Update Utility
[DLP]	refers to Dolby Lake Processor bundle
[Installer]	refers to the Installer

New functionality

- [LC, PLM] The PLM series now supports EAW Focusing through direct recall of greybox files from within the Lake Controller. A greybox recall will start the new “FIR” block program, and import all settings (including limiters etc) from the EAW greybox file (.gyx). The new FIR module is fully integrated into the Lake Controller and all system and frame operations are supported.
 - EAW greybox files can be downloaded from: <http://www.eaw.com/downloads/>
 - *Note:* Cannot recall greybox files with more than three channels. One FIR module takes up the processing power of both modules in a PLM.
- [LC] Increased performance in Lake Controller when running on Windows 7, multicore processors or with high resolution screens.
- [LC] Improved Ping/”Select Me” highlighting on Work area (from front panel trig) to remain when changing between pages or all view.
- [LC] Floppy disk icon replaced with HDD icon as “My computer” symbol.
- [LC] Added extended breaker information to the Breaker Emulation Limiter Configuration window.
- [PLM] It is now possible to transmit the power output Voltage and Current sense information out on the Dante output channels.
 - *Note:* New 3rd party control protocol, DLM v2.8, released. Please contact us for more information.
- [LC, PM, Updater] The applications are now certified by Lab.gruppen AB, and Publisher is changed from Lake to Lab.gruppen AB.
- [LoadLibrary] New LoadLibrary v2.6.

Issues corrected

- [LM] An issue where some LM 26 units after long time of operation sometimes could stop to receive Dante signals or get offline in the Lake Controller has been corrected.
- [LM] An issue where Dante output channels could get miss routed after power cycle has been corrected.
- [LM] Clock configuration is updated and it is now possible to reliably use the SRC and Primary clock, both locked to different phase base48k signals.
- [LM, PLM] DHCP configuration on primary port is now also supported when Dante Dual Redundancy is activated.
- [LC] Faster synchronization due to correct checksum calculation in more scenarios.
- [LC] Maximum group label is now 30 characters.
- [LC] Fixed the wrong calculation of Vpk for MaxPeak Level of the LimiterMax.
- [LC] Improved performance when changing Work area pages with meter icons on modules.
- [LC] Fast meters for Secondary Controller on Levels page.
- [LC] Fast meters for Secondary Controller on Status tab in Events&Control.
- [LC] The info text “*Only applicable for certain PLM models*” referring to that Mains log information only applies for PLM 20000Q amplifiers no longer stays when changing tab.
- [LC] CL6way is now possible to recall correct again.
- [LC] LP4way now has correct mute button on low channel and gain sliders.
- [LC] Fixed an issue where the Controller sometimes could halt on exit due to trying to store system data for modules no longer on the network.
- [LC] Changed drawing of “Please wait” so that it now works in *emulation mode*.
- [LC] Minimize and maximize now works in *emulation mode*.
- [LC] Fixed splash screen now works in *emulation mode*.
- [LC] Fixed missing mute button for the AUX channel for the LP4way module in the Meters view.
- [LC] it is now possible to have many modules on work area when enabling Dante without any unintentional Controller close during Dante input configuration.
- [LC] Multiple Controllers works for systems up to 250 modules.
- [LC] If a system file with lost/duplicated GEQ filters for a group is recalled, it will give attention to which groups that has the issue, and also give an option adding new default filters.
- [LC] Fixed a unintentional Controller close if the Batch replace window was opened without any offline or virtual modules on work area.
- [LC] Fixed the sorting on All-page after a Recall Last System Configuration.
- [PM (PLM)] Updated and enhanced error messages.
- [PM (PLM & LM)] When PLM or LM Preset Manager is closed on the top right “X”, it is now closing the application correct.
- [Installer] The migration option in the Installer is removed due to user misunderstandings.

Non-implemented features

- [PLM & LC] SpeakerSafe™ is disabled.
- [PLM & LC] User selection to disable LoadSmart™.
- [LC] Power output channel mute is not viewable from work area or All-page. (J#752)
- [PLM] Front panel gain reduction meter does not include the MaxRMS and MAXPeak limitation. (J#558)

Known Issues

Windows 7 support area:

The Lake Controller is still not yet fully optimized to Windows 7. On some computers the Controller can feel un-responsive and slow. There are a few things that can be configured in order to improve performance:

1. *Disable Power saving and Power management options*
Disable all power saving options. These can be either the Windows 7 default configuration “Control Panel\All Control Panel Items\Power Options>Edit Plan Settings - > Change advanced power settings” or for some laptop/tablet computer brands a standalone Power Management application that is supplied. The important configurations that can be made in order to improve performance is:
The options for CPU and/or PCI bus and/or PCI Express. By default these are set to Automatic/... power savings/Dynamic. Set them to **Disable** automatic, **Off** for power savings or **Maximum Performance** and reboot the computer.
2. *Run the Lake Controller in XP mode*
Windows XP mode for Windows 7 is a feature available in Windows 7 Professional edition only, and provides a virtual Windows XP environment in Windows 7. Use the following link to find information and installation:
<http://www.microsoft.com/windows/virtual-pc/download.aspx>
3. *Turn off multicore CPU in BIOS*
It has been tested that on some computers it might help to disable the multicore CPU functionality. This is done from BIOS. Please refer to your computer manual.

Disable Windows Aero Themes

1. Right click on desktop and choose “Personalize”
2. Scroll down and select the Windows 7 Basic or Windows Classic theme.

I can't find my system files, module files or Presets stored – where are they?

If a program is installed to the Program files folder in Windows 7, files that are stored by the user (system files, modules etc.) from within the Lake Controller is instead stored in:

`C:\Users*user*\AppData\Local\VirtualStore\Program Files\Lake\Lake Controller vX.Y\data\user`
Also please refer to the Lake Controller Operation manual for further assistance.

Known issues with the Lake Controller and firmware

- [LM] AES inputs and outputs that lock to the SRC clock will not have the input and output clock phase aligned. (J#2253)
- [LM] After long time of operation with Dante some units may have problems routing channels correctly. Channels might be mixed into others or experience higher distortion. (J#2015)
 - *Workaround:* Powers cycle the system once every day.
- [LM] When transmitting channels on Dante some units may occasionally introduce very short glitches on the Dante audio stream. (J#2479)
- [PLM] Some units might experience difficulties applying a route from another Dante unit. Input router will accept dropping channel in priority tab but tab will not be selected. (J#2485)
 - *Workaround:* Replace the Dante transmitter for another unit and retry.
- [LC] When subscribing Dante channels on a receiving unit, and multiple NIC's are active, a error might occur if the NIC communicating to the Lake/Dante network is on another range then 169.254.X.Y.
 - *Workaround:* The network interface needs to be in the same IP subnet as the devices you wish to communicate with. In this case, 169.254.X.Y. Or only have one NIC active.
- [PLM] Very rarely during the Amp firmware upgrade, the front panel can halt before 100% of the firmware update is reached.
 - *Workaround:* Please power cycle the frame and the firmware update will be completed.
- [LC, PLM & LM] When running a dual redundant Ethernet network, there is a possibility to run the Controller on the secondary network if the IP on the Controller computer is changed to

range 172.31.x.x and Subnet mask to 255.255.0.0. Attaching a Controller to both the Primary and Secondary network connections simultaneously is not possible. (J#775)

- [LC] There is issue that FIR modules from different EAW greybox imports, but still with the same nr of DSP channels, can be assigned to the same Super Module resulting in out of sync.
 - *Workaround:* Confirm that it is the same EAW greybox file in all modules before assigning to a Super Module.
- [LC] There is issue with the CL3way+1aux module and Super Modules. The 1aux channel is missing in the Super Module routing view.
- [LC] There can be issues with Super Modules if 2-way from A and B modules are combined.
- [LC] When shifting Dante sample rate between 96 and 48 kHz mode, Dante needs to be disabled and re-enabled, otherwise the channels will not be displayed. (J#1537)
- [PLM] When downgrading from firmware 2.68 to earlier firmware, it is required to perform a factory reset before downgrading, and one after the downgrade. (T#1520)
- [LC] With multiple Controllers 2-aux module files will not sync changes to EQ AUX-tabs between primary and secondary. (J#1437, 1386)
 - *Workaround:* Use 3-aux module files instead, or add any filters needed from primary Controller.
- [LC] Recalling old system files might lead to a “Mute indication” on the group icon on Work area.
 - *Workaround:* De-assign all assigned modules and enter the Levels page for the group and un-mute.
- [LC] If the GEQ is changed too rapidly on different frequencies this can lead to problems transferring and recalling settings. (J#1162, J#1201, J#1207)
- [LC] When implementing very large systems, please use a computer with specifications above the minimum requirements. Status bar error message 8, 14 and 1158 are indications of Windows resource being exhausted. The Windows resource setting that is proposed in the installer can help to resolve these issues. (J#708, J#660, J#769, J#861)
- [LC] A system with more than one secondary Lake Controller has communication problems. There are also a few minor security problems with secondary Controllers (J#523, J#524, J#667, J#668, J#657, 724)
- [LC] If connection to primary Controller is lost from secondary Controller, Events and Control popup values can still be edited from secondary Controller – however these changes never reach the frames and when connection is established to primary Controller again all changes done on secondary will be lost. (J#1431)
- [PLM & LC] LoadSmart™ warning messages can sometimes fail to be displayed on the front panel and in the Lake Controller. (T#1133)
- [LC] A Classic 3-way module loaded to module B presents an incorrect channel name on the crossover page for the low channel (shows high instead of low). (J#578)
- [PLM & LC] User interface does not synchronize front panel changes when the Controller is on the Module B levels page. (J#585)
- [LC] Amp Clip factory setting is not automatically set to the power output channel's theoretical clip voltage. (J#455)
- [LC] The Ambient temperature can, during some operations, return to the default value. (J#965, J#967, J#1167, J#1168)
- [LC] Frames added to work area after a secondary Controller has been disconnected might not show up on secondary Controller after a re-connect. (J#1316)
- [LC] The fast sync between Controller and processors does not work as expected in all situations, and slightly longer sync times can sometimes occur. (J#1343)
 - *Workaround:* Store and recall the system might help in some cases.
- [LC] Super Modules do not indicate on work area if the module is part standby. (J#830)
 - *Workaround:* Double check on All-page that all frames are online.
- [LC] Faults and warnings are not indicated on Super Modules that are part standby or offline. (J#1665)

- *Workaround:* Double check on All-page that all frames are online.
- [LC] Groups with many assigned Super Modules will have a few seconds processing time before changes made from the group have been synced correctly. During this time there is a GUI issue where the group name tab will flicker (J#1353)
- [LC] Multiple recalls of the same Subsystem places the modules on top of each other even if the “auto arrange” feature is turned on. (J#614)
- [LC] The Levels page meters will lose high update rate after a re-sync if in that view. (J#489)
 - *Workaround:* Close and open the Levels Page.
- [LC] Recall compare does not work for virtual frames. (J#707)
- [LC] Storing a Sub-system will update the name on the current system. (J#860)
- [LC] Recalling LP 4-way module files where DSP channel 3 has maximum delay might cause an error message to be displayed. (J#791)
 - *Workaround:* Re-route the specific muted power output channel to unlock the unwanted mute.
- [LC] Loading or adding virtual frames to an offline system may replace the offline real frames.
- [LC] Recall Compare can alter the input mute indications. (J#1163)
- [LC] Storing an altered LP 4-way module file as a “New Store” will result in some Events and control parameters being lost. (J#1426)
 - *Workaround:* Double check the Events and control parameters for this module.
- [LC] Cable data for LoadSmart functionality does not get copied during a copy / paste action. (T#1492)
- [LC] Copying of LP 3-way might cause rounding errors on Xover frequency. (J#908)

Safe Mode Image installation instructions for PLM Series and LM 26

Important bug fixes have been made in the Safe Mode Image firmware. This firmware is initiated the first few seconds after power have been applied to the frame. Please read thru the release history for the Safe Image and see if you are in a position where you need to update to latest version.

Component	Version	Comment
PLM Series Safe Image	0.02	Fixed an issue where the PLM booted up with the Ethernet interface in daisy chain mode also when Dual Redundancy was activated. Dual Redundancy can't be activated with 0.01.
PLM Series Safe Image	0.03	If the PLM already is upgraded with 0.02 there is no need to upgrade to 0.03. If 0.01 is installed it is recommended to upgrade to 0.03. If the device after firmware upgrade reboots as SAFE it is solved by 0.03.
LM 26 Safe Image	0.02	Fixed an issue where the GPO for a short period during boot up was set to Closed.

Instructions

Check what version of Safe Mode Image that currently is in use in your PLM or LM. Check from the front panel interface by pressing Menu > Frame > Frame info > FW Version.

WARNING: ALL PRESETS AND DATA IN THE FRAME WILL BE LOST. If desired please backup current settings and all frame presets using the PLM or LM Preset Manager, and ensure a reliable power source and network connectivity before proceeding!

PROCEDURE:

1. Open the Lake Firmware Update Utility supplied in this release.
2. Select the device of interest (PLM Series or LM 26).
3. Tap SELECT.
4. Select Version, for:
 - o PLM; "99.03 LAB - SAFE MODE IMAGE v0.03 - 1-Mar-10" and tap OK.
 - o LM 26; "99.02 - SAFE MODE IMAGE v0.02 - 31-Mar-10" and tap OK.
5. Read the warning message and tap OK if you wish to proceed.
6. Select the frames you wish to update and tap UPDATE.
 - o Wait for dialog with message to power cycle the frame.
7. Cycle the mains power on the frame(s).
8. Wait for the standby button to go from red to briefly turn green then back to red, indicating that the Safe Mode Image upgrade is completed. The frame is now in Safe Mode as indicated in the Firmware Update Utility.
9. Tap SELECT and select the bundle target firmware then tap OK.
10. Select the frames to update then tap UPDATE.
11. Cycle the mains power on the frames to complete the firmware upgrade.
12. Use the front panel menu on each frame to perform a FACTORY RESET.

NOTE:

For PLM Series: The Safe Mode Image must be >v0.02 to be able to activate Dual Redundant Dante network configuration from the Lake Controller.

In firmware >2.51 the version number of the Safe Mode Image is displayed in the front panel firmware version view.

PLM Series firmware downgrade from firmware >2.78 instructions

If you for some reason need to downgrade your PLM device from firmware 2.78 or later, to any previous release of PLM Series firmware, you will need to go through a new PLM Series intermediate firmware bundle. Direct downgrade from firmware >2.78 to any previous release firmware is prohibited and blocked. By first change the PLM to firmware 2.75 it is possible to change to any given release firmware, i.e. back previous release 2.69, 2.68 etc or direct back up to this release firmware.

Information about the Intermediate PLM Downgrade bundle

PLM Intermediate downgrade bundle 2.75:

- Does not pass audio
- Default state ON
- Lake Controller use is not supported

WARNING: ALL PRESETS AND DATA IN THE FRAME WILL BE LOST. If desired please backup current settings and all frame presets using the PLM or LM Preset Manager, and ensure a reliable power source and network connectivity before proceeding! You cannot use frame presets converted for firmware >2.78 in any previous release.

PROCEDURE:

13. Open the Lake Firmware Update Utility supplied in this release.
14. Select PLM Series as the device of interest
15. Select the; "LAB PLM - Intermediate Downgrade Bundle 2.75 - 26-Oct-10"
16. Select the frames you wish to update (to later on be able to downgrade) and tap UPDATE.
 - o Wait for the dialog with message to power cycle the frame(s).
17. The PLM(s) will automatically start up independent on previous power state and the firmware will be updated in the PLM.
18. When the PLM front panel displays the message "Intermediate Downgrade Bundle, Please load a new firmware" it is ready to load any firmware bundle.

Release History

Release v5.6 build 008 – Patch Installer 36 – 2010-11-16

Component	Version	New in 5.6	Comment
Installer	36	X	
Lake Controller	v5.6 build 008	X	
PLM Series Firmware	Bundle 00.02.78	X	
<i>DSP</i>	00.02.78	X	
<i>FPGA</i>	41		
<i>Front</i>	1.6.0	X	
<i>Amp</i>	0.14.0, PSU	X	
<i>Dante</i>	2.2.13		
PLM Series downgrade bundle	Bundle 00.02.75	X	Intermediate bundle for downgrade between this release and previous releases, please see separate instruction section.
PLM Safe Mode Image	0.03 (labeled 99.03)		See installation instructions section.
LM 26 Firmware	Bundle 00.00.34	X	
<i>DSP</i>	0.34	X	
<i>FPGA</i>	84		
<i>Front</i>	1.0.3	X	
<i>Dante</i>	2.2.12		
LM Safe Mode Image	0.02 (labeled 99.02)		See installation instructions section.
<i>Legacy Product Firmware</i>			
Dolby Lake Processor	1.50.53	X	Received from Dolby
Lake Contour	4.16.34		Received from Dolby
Lake Mesa	4.21.28		Received from Dolby
<i>Firmware Update Utilities</i>			
Lake	2.0.0.6	X	Selection for PLM Series or LM 26
Dolby Lake Processor	2.0.0.3		
Lake Contour	1.0.0.8		
Mesa	1.0.0.8		
<i>Preset Manager Utilities</i>			
PLM Series	1.0.92.0	X	New since Installer 35
LM 26	1.0.90.3	X	
Dolby Lake Processor	1.0.72.0		
Lake Contour	1.0.72.0		
Mesa	1.0.72.0		
LoadLibrary™	2.4	X	See separate release note.
Bonjour	2.0.2.0	X	Received from Apple Inc.
<i>Documentation operation</i>			
Lake Controller Operation Man	1.2.5	X	
PLM Operation Manual	1.2.3	X	
LM 26 Operation Manual	1.2.3	X	

New functionality

- [PLM, LM & LC] Most of the communication between PLM Series and LM 26 devices and the Controller has been converted from UDP Broadcast to UDP Unicast, resulting in far less traffic on the network. This improves performance using the Lake Controller over Wi-Fi access points.
- [PLM & LC] Bridge Mode configuration for all PLM Series models are added!
 - ISVPL configuration now extends the upper configuration to 600 V to incorporate for the double voltage of a bridge channel.
 - *Note:* The “**Level limits**” available on the Control tab (in Designer mode) in the Events & Control of the Controller will need to be extended if this has a lower limit set.
 - **IMPORTANT: When Bridge Mode is activated, CLASS 3 WIRING is required.**
- [PLM & LC] Enhanced faults and warnings indications for PLM 20000Q. See PLM Series Operation Manual for full details.
- [PLM & LC] Digital clock slipping indication added on work area for PLM Series, LM 26 and the Dolby Lake Processor (DLP). For PLM it is also added in Status tab and on front panel.
- [PLM] Dante Clock master front panel indication added in the lower left corner of home view.
- [PLM] After a complete firmware upgraded it is prompted to cycle mains power to complete the firmware upgrade on the front panel.
- [PM] Added support for PLM 20000Q in Preset Manager.
- [LC] Added an illegal Dante channel name block. This will only allow standard a to z, capital and lower case letters and 1 to 9 complemented by “-“. This due to the former ability to use illegal characters without a proper warning and having issues with assigning Dante channels.
- [PLM] Added a PSU temperature warning.
- [PLM] Added a DSP area temperature warning, and the DSP area temperature will also influence the fan speed.
 - *Note:* DSP area temp fault will from here on not mute audio, but continued operation without improved air ventilation is not recommended.
- [PLM & LC] The Mains Current Limiter has been renamed to Breaker Emulation Limiter Configuration.
 - *Also:* Fuse selector -> Breaker characteristics, Slow characteristic -> Universal characteristic.
- [LC] Improved error message if the UDP port 6004 already is in use by another program and the Lake Controller is unable to start.
- [LC] Removed the confusing “AUX” string from the “Input router” selection in the LM 26 Output routing.
- [PLM] More robustness added to the PLM 20000Q PSU, so that it now can tolerate a mains glitch (short dropout of mains voltage) and/or a mains spike.
- [PLM & LM] New 3rd party control protocol, DLM v2, released. Please contact us for more information.

Issues corrected

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- [PM] Fixed an issue where multiple conversions of frame preset bank files in Preset Manager resulted in corrupt frame preset bank files. This is now fixed with PLM Preset Manager 1.0.92.0.
 - *Note:* Frame preset bank files already corrupted can't be restored. Use PLM Preset Manager 1.0.92.0 directly on your backup file.

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- [LC] Improved performance of the Batch Replace window, particular the performance on Windows 7 systems has been significantly improved.
- [LC] Fixed a memory leak that could cause the Controller to close unintentionally.

- *[PLM]* Updated CAL configuration for improved amplifier module protection during continuous signals.
- *[LC]* Fixed an issue where the use of the command line “emulation” would cause a crash after minimize and maximize. Adding “Emulation” as a command line will improve the performance when using the Controller in a VNC setup.
 - *Note:* In Windows® 7, Windows Aero needs to be disabled (See Windows 7 help section) .
- *[PLM]* Fixed an issue where the PLM 20000Q could go to standby state (unable to start) after a firmware update.
- *[LC]* Fixed an issue where the Lake Controller could not direct the LM 26 to standby or go online from the Global Control.
- *[LC]* Fixed an issue where the Controller could not fetch the PLM log for the first four hours of running time.
- *[LC]* Adjusted the mains Voltage history graph in the Events and Control view to start at 0V.
- *[LC]* Fixed an issue with file menu bars locking the user inside directories to which the user did not have access to list the contents.
- *[LC]* The Breaker characteristics scrollbar in the BEL Config window no longer disappears after the Controller has been minimized and maximized.
- *[LC]* Improved after-glow on Status tab for PLM faults and warnings.
- *[PLM]* Risk of false detection of internal amp channel blown fuse is eliminated (“Service Ch.”).
- *[PLM]* Fixed the un-preferred state where the PLM 20000Q would go back to standby after being turned on.
- *[PLM]* The fans will be on for a longer time when the device is set to standby.
- *[LC]* For Multiple Controller operation and the connection stability between Controllers, several improvements have been implemented.
- *[PLM]* The Auxiliary clock selection is correctly restored after a power cycle.
- *[PLM]* Fixed an issue with Recall Compare, where the Controller sometimes could indicate that the system files was corrupt.
- *[LC]* Fixed so that frame input mute now is indicated in Status tab, Event log and All tab.
- *[DLP]* New DLP firmware bundle received from Dolby, with improved network stability.

Release v5.5 build 014 – 2010-06-11

Component	Version	Comment
Installer	34	
Lake Controller	v5.5 Build 014	
PLM Series Firmware <i>DSP</i> <i>FPGA</i> <i>Front</i> <i>Amp 10000Q and 14000</i> <i>Amp 20000Q</i> <i>Dante</i>	Bundle 00.02.69 00.02.69 41 1.5.0 0.13.1 0.13.1PSU 2.2.13	Same for all PLM Series devices.
PLM Safe Mode Image	0.03 (labeled 99.03)	See installation instructions separate section.
LM 26 Firmware <i>DSP</i> <i>FPGA</i> <i>Front</i> <i>Dante</i>	Bundle 00.00.29 0.29 84 1.0.2 2.2.12	
LM Safe Mode Image	0.02 (labeled 99.02)	See installation instructions separate section.
<i>Legacy Product Firmware</i> Dolby Lake Processor Lake Contour Lake Mesa	1.50.51 4.16.34 4.21.28	
<i>Firmware Update Utilities</i> Lake Dolby Lake Processor Lake Contour Mesa	2.0.0.6 2.0.0.3 1.0.0.8 1.0.0.8	Different selection for PLM Series and LM 26
<i>Preset Manager Utilities</i> PLM Series LM 26 Dolby Lake Processor Lake Contour Mesa	1.0.90.1 1.0.89.1 1.0.72.0 1.0.72.0 1.0.72.0	
LoadLibrary	2.3	See separate release note.
Bonjour	2.0.0.36	

Issues corrected

- Fixed a bug where the Controller did not properly indicate Old firmware for PLM devices with firmware version 2.51. With this release all firmware versions older than the included FW is reported as Old firmware.
- Fixed a bug where old presets not were converted correct.
- Fixed a bug where a Contour Pro26 with firmware v2.137 (from release v3.2) showed up in the LM 26 firmware Update Utility.
- Fixed a bug where Dante 48kHz only was able to transmit 2 and received 2 channels instead of 4 and 8.
- Fixed a bug where the front panel could be corrupted and halted in initializing, or start to blink upon load of a module file with long channel names.

Release v5.5 build 011 – 2010-04-22

Software components in this installer

Component	Version	Comment
Installer	32	
Lake Controller	v5.5 Build 011	
PLM Series Firmware <i>DSP</i> <i>FPGA</i> <i>Front</i> <i>Amp 10000Q and 14000</i> <i>Amp 20000Q</i> <i>Dante</i>	Bundle 00.02.69 00.02.69 41 1.5.0 0.13.1 0.13.1PSU 2.2.13	Same bundle for all PLM Series models
PLM Safe Mode Image	0.03 (labeled 99.03)	See installation instructions separate section.
LM 26 Firmware <i>DSP</i> <i>FPGA</i> <i>Front</i> <i>Dante</i>	0.28 82 1.0.1 2.2.12	
LM Safe Mode Image	0.02 (labeled 99.02)	See installation instructions separate section.
<i>Legacy Product Firmware</i> Dolby Lake Processor Lake Contour Lake Mesa	1.50.51 4.16.34 4.21.28	
<i>Firmware Update Utilities</i> Lake Dolby Lake Processor Lake Contour Mesa	2.0.0.4 2.0.0.3 1.0.0.8 1.0.0.8	Different selection for PLM Series and LM 26
<i>Preset Manager Utilities</i> PLM Series LM 26 Dolby Lake Processor Lake Contour Mesa	1.0.89.0 1.0.89.1 1.0.72.0 1.0.72.0 1.0.72.0	
LoadLibrary™	2.2	See separate release note.
Bonjour	2.0.0.36	

New functionality

- Improved clock synchronization with Dante.

Release v5.5 build 011 – 2010-04-09

Components in the installer

Component	Version	Comment
Installer	31	
Lake Controller	v5.5 Build 011	
PLM Series Firmware	Bundle 00.02.68	
<i>DSP</i>	00.02.68	
<i>FPGA</i>	41	
<i>Front</i>	1.5.0	
<i>Amp</i>	0.13.1PSU	
<i>Dante</i>	2.2.13	
PLM Safe Mode Image	0.03 (labeled 99.03)	See installation instructions separate section.
LM 26 Firmware		
<i>DSP</i>	0.28	
<i>FPGA</i>	82	
<i>Front</i>	1.0.1	
<i>Dante</i>	2.2.12	
LM Safe Mode Image	0.02 (labeled 99.02)	See installation instructions separate section.
<i>Legacy Product Firmware</i>		
Dolby Lake Processor	1.50.51	
Lake Contour	4.16.34	
Lake Mesa	4.21.28	
<i>Firmware Update Utilities</i>		
Lake	2.0.0.4	
Dolby Lake Processor	2.0.0.3	
Lake Contour	1.0.0.8	
Mesa	1.0.0.8	
<i>Preset Manager Utilities</i>		
PLM Series	1.0.89.0	
LM 26	1.0.89.1	
Dolby Lake Processor	1.0.72.0	
Lake Contour	1.0.72.0	
Mesa	1.0.72.0	
LoadLibrary	2.2	See separate release note.
Bonjour	2.0.0.36	

New functionality

- The Firmware update functionality from within the Controller has been disabled. Please use the stand alone Firmware Update Utilities.
 - Lake Updater is for both PLM Series and LM 26, select type the with button switch upon start-up. Only the appropriate frames and firmware are displayed after the selection.
- The Voltage and Limiter value on the status tab, in the Events & Control pop-up, have been updated to work as peak and hold values. The hold is 2 seconds, if not any new peak value occurs during that period.
- For PLM, four new ISVPL profiles have been added on CONTROL tab in Events & Control! These are Sub, LF, MF and HF and are all optimized for high SPL.

- LoadLibrary 2.2 module files. See separate release note.
- With new PLM firmware additions Dante performance have been improved.
- Ability to see the Safe Mode Image version added to the front panel of the LM 26, in the firmware version menu.
- A “Please power cycle” screen is displayed after a firmware upgrade of the LM 26.

Issues corrected

- Fixed a bug where the fast checksum sync not always were working after a Load Last Config for the Controller.
- Fixed a bug where modules would not go offline at all in Lake Controller v5.5.009.
- Fixed a bug where the Designer mode level limits for ISVPL and Amp Gain was not displayed in the Controller unless the channel was routed.
- Fixed a bug where the Store System sometimes failed and the system file became corrupt.
- Fixed a bug where the Controller could indicate the presence of a fault without any fault being active.
- Fixed a bug where Mod Out Mute would be indicated on all Amp channels routed to that module on Status tab in the Controller.
- Fixed a bug for clip indications on Status tab in the Controller.
- Multiple Controllers are now working again.
- The new Bonjour version is less likely to crash with the Lake Controller.
- Fixed an issue where it was easy to accidentally put on the PLM to standby on power up from the front panel.
- Fixed the issue where the PLM sometimes instantly returned to standby after being powered on.
- Significantly improved Dante performance in Dual Redundant mode. Frames will not switch over to Analog in case they loose the signal on the primary network and have secondary network backup.
- Dante Clock master selection has been improved.
- Fixed a Dante issue for the LM 26 where it was impossible to use many Unicast channels in Dual Redundant mode.
- Fixed an issue where GPO was closed during boot up if “when fault” were used on the LM 26.

Release v5.5 build 009 – 2010-03-23

Components in the installer

Component	Version	Comment
Installer	Build 30	
Lake Controller	v5.5 Build 009	
PLM Series Firmware	Bundle 00.02.64	
<i>DSP</i>	00.02.64	
<i>FPGA</i>	41	
<i>Front</i>	1.4.2	
<i>Amp 10000Q and 14000</i>	0.12.3	
<i>Amp 20000Q</i>	0.13.0p14PSU	
<i>Dante</i>	2.2.13	
PLM Safe Mode Image	0.03 (labeled 99.03)	
LM 26 Firmware	Bundle 0.26	
<i>DSP</i>	0.26	
<i>FPGA</i>	81	
<i>Front</i>	1.0.1	
<i>Dante</i>	2.2.12	
<i>Legacy Product Firmware</i>		
Dolby Lake Processor	1.50.51	
Lake Contour	4.16.34	
Lake Mesa	4.21.28	
<i>Firmware Update Utilities</i>		
Lake	2.0.0.4	
Dolby Lake Processor	2.0.0.3	
Lake Contour	1.0.0.8	
Mesa	1.0.0.8	
<i>Preset Manager Utilities</i>		
PLM Series	1.0.89.0	
LM 26	1.0.89.1	
Dolby Lake Processor	1.0.72.0	
Lake Contour	1.0.72.0	
Mesa	1.0.72.0	
LoadLibrary	2.2	See separate release note.

New functionality

- Full support for the all new PLM Series flagship – the PLM 20000Q, with virtual files etc.
- The same PLM Series firmware is used across the whole range of PLM Series amplifiers.
- Full support for the all new Lake processor – the LM 26, with virtual files etc.
 - Please see the updated Lake Controller manual for additional information.
- Added a “Clock slipping” warning for Dante and AES inputs, this is displayed in the Controller (as well as front panel for the LM 26) and the information is also stored in the Event log file.
- The Firmware update functionality from within the Controller has been disabled. Please use the stand alone Firmware Update Utilities.

- Lake Updater is for both PLM Series and LM 26, select type the with button switch upon start-up. Only the appropriate frames and firmware are displayed after the selection.
- The digswitch feature has been improved with additional information regarding which priority all input routers are using etc.
 - *How to use:* Create a shortcut to the Lake Controller.exe and add *digswitch* after the target link.
- A user object counter can be displayed in the Controller. This will help to keep track of the number of objects in use, and how close to the user is to the User object limit.
 - *How to use:* Create a shortcut to the Lake Controller.exe and add *userobj* after the target link.
- The button text “PLM info” in has been renamed to generic “Events & Control” for both PLM and LM frames. (J#1597)
- The button text “Amplifier menu” in All tab has been renamed to “Global info” with a submenu called “Events & Control”.
- The 0.5 ms Dante latency option for the LM 26 is just to be used when two LM 26s are directly connected thru Gigabit.
- The Voltage and Limiter value on the status tab, in the Events & Control pop-up, have been updated to work as peak and hold values. The hold is 2 seconds, if not any new peak value occurs during that period.
- For PLM, four new ISVPL profiles have been added on Control tab in Events & Control! These are Sub, LF, MF and HF and are all optimized for high SPL.
- LoadLibrary 2.2 module files. See separate release note.
- PLM firmware with improved Dante performance.
- The ISVPL have been extended to 194 V to suit the PLM 20000Q. Still with automatic adjustment to model maximum.
- Four new ISVPL profiles available! These are Sub, LF, MF and HF and are all optimized for high SPL.
- DLM (3rd Party Control Protocol) now has the possibility to also store presets with the new PLM firmware. See *DLM control protocol v1.1* for more details.
- Ability to see the Safe Mode Image version added to the front panel in firmware version menu of the LM 26.
- A “Please power cycle” screen is displayed after a firmware upgrade on the LM 26.

Issues corrected

- Fixed a bug where the fast checksum sync not always were working after a Load Last Config.
- Fixed an issue where frames were not identified as offline as rapidly as expected, for example in the event of a network or mains failure.
- Fixed a bug where modules would not go offline at all in v5.5.009
- Fixed a bug where 2way modules missed information for the High band on the Designer mode EQ table.
- Fixed a bug where the Designer mode level limits for ISVPL and Amp Gain was not displayed unless the channel was routed.
- Fixed a bug where the Store System sometimes failed and the system file became corrupt.
- Fixed a bug where the Controller could indicate the presence of a fault without any fault being active.
- Fixed a bug where Mod Out Mute would be indicated on all Amp channels routed to that module on Status tab.
- Fixed a bug for clip indications on Status tab.
- Multiple Controllers are now working again.
- The new Bonjour version is less likely to crash with the Lake Controller.

- Fixed an issue where it was easy to accidentally put on the PLM to standby on power up from the front panel.
- Fixed the issue where the PLM sometimes instantly returned to standby after being powered on.
- Significantly improved Dante performance in Dual Redundant mode. Frames will not switch over to Analog in case they lose the signal on the primary network and have secondary network backup.
- PLM Dante Clock master selection has been improved.
- Fixed the Dante issue where it was impossible to use many Unicast channels in Dual Redundant mode on the LM 26.
- Fixed an issue where “when fault” on GPO was used, it was set to closed during boot.

Release v5.4 build 003 - 2009-11-24

Components in the installer

Component	Version	Comment
Installer	Build 29	
Lake Controller	v5.4 Build 003	
<i>PLM Series Firmware</i>	Bundle 00.02.51	
DSP	00.02.51	
FPGA	40	
Front	1.4.0	
Amp	0.12.3	
Dante	2.2.5	
PLM Safe Mode Image	0.02	
<i>Legacy Product Firmware</i>		
Dolby Lake Processor	1.50.51	
Lake Contour	4.16.34	
Lake Mesa	4.21.28	
<i>Firmware Update Utilities</i>		
PLM Series	1.0.0.12	
Dolby Lake Processor	2.0.0.3	
Lake Contour	1.0.0.8	
Lake Mesa	1.0.0.8	
<i>Preset Manager Utilities</i>		
PLM Series	1.0.74.0	
Dolby Lake Processor	1.0.72.0	
Lake Contour	1.0.72.0	
Lake Mesa	1.0.72.0	
LoadLibrary	2.1	

New functionality

- The Safe Mode Image version is displayed in the front panel “FW version” view.
- When a Lake Controller is not connected to the PLM, the timestamp in the log files is now written as “N/A” instead of 1969-12-31 or 1970-01-01.
- The “Analog in fault” detection has been improved. Previously this could give false error indication.
 - “Analog in fault” can still flash fast when analog connectors are connected. But in this event there is no fault.
- The button text “Amplifier info” in the Lake Controller has been renamed to “PLM info”.
- A LM 26 virtual icon is implemented in the Controller. In this release all functionality for LM 26 is blocked.
- LoadLibrary 2.1 module files and a preset data bank for PLM 10000Q.
- A new Lake Controller Operations Manual is included, which combines three legacy manuals.
- The front panel “Labgruppen” splash screen is cleared faster at startup.

Issues corrected

- Several critical Dante improvements have been made in respect of master clock selection switching from unicast to multicast, and functionality when Dante is disabled via the Controller. This will improve the Dante system performance for both PLM and DLP and mixed systems.

- Fixed an issue where the signal level was different between DLP Dante transmitters and receivers.
- PLM Preset Manager v.1.0.73.0 is no longer unstable at startup and can handle large systems and big preset transfers.
- After a Factory Reset from the front panel of the DLP there is now a message forcing the user to cycle the power of the processor.
- Fixed a bug where it was impossible to append to the system file name if trying to store from a page other than the Main page.
- New virtual frame icons for PLM 10000Q and PLM 14000 that reflects the correct number of output channels, as well as the yellow identity line for PLM 14000.
- Fixed bug where an LP 2-way+1-aux module is overwritten with a CL 4-way+2-aux combination and DSP channel 5 stopped outputting audio.
- LP 2-way + 1-aux module can now be assigned to Super Modules.
- Preset recall from Controller for a 3-way+1-aux does not make Amplifier Gain and ISVPL revert to back default anymore.
- Copying of LP 4-way module to another module will now not causes any DSP-channel to disappear.
- Fixed a bug where the Controller could crash if the event log was scrolled in the same time as a new event was registered.

Release v5.3 build 004 - 2009-07-06

This is a patch release to installer 27 which contained an older version of the legacy Dolby® Lake Processor Firmware.

Components in the installer

Component	Version	Comment
Installer	Build 28	
Lake Controller	v5.3 Build 004	Same as installer 27
Lab.gruppen Extension	v1.5 Build 186	Same as installer 27
PLM Series Firmware	Bundle 00.02.42	Same as installer 27
DSP	00.02.42	
FPGA	40	
Front	1.3.0	
Amp	0.12.2	
Legacy Product Firmware		
Dolby Lake Processor	1.50.46	Updated to match the Lake Controller
Lake Contour	4.16.31	Same as installer 27
Lake Mesa	4.21.26	Same as installer 27

Issues corrected

- New DLP firmware, received from Dolby.

Release v5.3 build 004 - 2009-07-03

Unfortunately Installer 27 included an older version of the legacy Dolby Lake Processor (DLP) Firmware. DLP firmware 1.50.46 is required to operate with v5.3 of the Lake Controller. **Place DLP firmware 1.50.46 in the “firmware” subfolder of the installation directory or implement Installer 28.**

Components in the installer

Component	Version	Comment
Installer	Build 27	
Lake Controller	v5.3 Build 004	
Lab.gruppen Extension	v1.5 Build 186	
PLM Series Firmware	Bundle 00.02.42	
DSP	00.02.42	
FPGA	40	Same as last release
Front	1.3.0	Same as last release
Amp	0.12.2	Same as last release
Legacy Product Firmware		
Dolby Lake Processor	1.50.45	Does not match the Lake Controller!
Lake Contour	4.16.31	
Lake Mesa	4.21.26	

Issues corrected

- New installer build 27.
- New Lake Controller 5.3 build 004.
- New PLM Series firmware 2.42.
- New PLM Preset Manager, version 1.0.73.0, for both PLM 10000Q and PLM 14000 solves the issue with incorrect indication of “Old firmware” on startup.

Lab v5.3 003 - 2009-06-17

This release has problems affecting conversion of frame presets and system files from previous releases. ***This release MUST NOT be implemented.*** Please install v5.3 build 004 and firmware 2.42 instead.

Components in the installer

Component	Version	Comment
Installer	Build 26	
Lake Controller	v5.3 Build 003	
Lab.gruppen Extension	v1.5 Build 186	
PLM Series Firmware	Bundle 00.02.41	
	DSP 00.02.41	
	FPGA 40	
	Front 1.3.0	
	Amp 0.12.2	

New functionality

- In the Lab.gruppen extension there is now facility to set Amp Gain and ISVPL™ for all DSP channels.
- ISVPL profile can now be set individually per DSP channel, both from the Lab.gruppen extension and from the front panel. (J#1215, T#1407, T#1408)
- LoadLibrary 2.0 module files updated with correct ISVPL profile.
- Added an EQ/Levels shortcut button for Solo / Mute with Super Modules. (J#1338)
- BETA support for Dante 48k. (J#1210, J#1312)
- Lab.gruppen extension is available from All-page on secondary Controller when running multiple Controllers. (J#1359)
- Added a shortcut to Lab.gruppen extension for Super Modules from Levels page when running multiple Controllers. (J#1409)
- The functionality “Recall as virtual” is renamed “Recall As Virtual Sub-Sys”.

Issues corrected

- Group and Super Module icons now have the same Faults and Warnings message as modules on work area.
- Multiple Controller stability and functionality have been improved.
- Recall as virtual or Recall Last system config no longer clears events and history logging.
- Resolved an issue where it was impossible to store over an existing Base Configuration file.
- Resolved an issue where the input polarity changed upon muting from the input mixer.
- Resolved an issue where the Controller could crash if a module file was recalled when no module was selected.
- Resolved the issue with the DLP Preset Manager that could not access DLP frames.
- Resolved an issue with history logs and events disappearing if Recall Last system config was used.
- Resolved an issue with changing Amp Gain and ISVPL for 3-way Super Modules.
- Bonjour is now updated also if there is a previous version detected on the system.
- Faster syncing has been implemented for Super Modules.
- Resolved an issue where group icons could indicate Faults and Warnings for modules in scroll bar.
- Resolved an issue where recalled virtual sub-system containing Super Modules didn't have all their modules added to All-page or work area.

- Resolved an issue where it sometimes was impossible to assign a second module to a Super Module.
- Improved error messaging for system file loads.
- The incorrect sorting of modules in All-page on secondary Controller has been resolved.
- A problem with assigning A and B 2-way modules to Super Modules has been solved.
- Resolved an issue where Super Module control problems could arise if A and B modules were mixed in the same Super Module.
- Issue with occasionally migrating 0.1 V ISVPL is fixed.
- The actual value for ISVPL is now correctly displayed for Super Modules.
- Resolved an issue where Lab.gruppen extension parameters didn't get correctly transferred after a batch replace.
- Resolved the issue where Lab.gruppen extension parameters for modules in Super Modules were reset after a Recall Last system config.
- A problem with changing Lab.gruppen extension parameters for the "low" band in a 3-way Super Modules has been solved.
- Resolved an issue where the Control tab information for Module B was wrong, when a 4-way or 5-way (or 4-aux and 5-aux) module was recalled to Module A.
- Resolved a crash when no module outputs were used.

Lab v5.1.053 - 2009-02-10**Components in the installer**

Component	Version	Comment
Installer	Build 24	
Lake Controller	v5.1 Build 053	
Lab.gruppen Extension	v1.4 Build 179	
PLM Series Firmware	Bundle 00.02.30	Same as last release
DSP	00.02.30	
FPGA	38	
Front	1.2.1	
Amp	0.12.1	

New functionality

- PLM standby state is now more clearly indicated on work area in the Controller.
- A shortcut to I/O Config page is added to the Levels page.
- ISVPL™ Profile has been introduced in the Control tab, this is default Sub/LF for PLM 14000 and Universal for PLM 10000Q power output channels. In future releases this will be editable on all PLM Series models. Group icons and Super Module icons in the work area now show Faults and Warnings from member Frames and Channels.
- A separate Preset Manager is created to handle bank/presets for PLM 14000.
- All documentation is updated.

Issues corrected

- Resolved an issue where Super Modules and groups could have issues with mute persistence when recalling system files and Load last config.
- Correct headroom compensation is being applied in all scenarios.
- Optimized transfer of group level changes in very large systems.
- Input mixer meter level is now correct when in +4 dBu mode.
- PLM Preset Manager 1.70 can now handle Bank files created in previous versions of the PLM Preset Manager.
- Resolved an issue where the Lake Controller would crash when recalling modules to empty Super Modules.
- Optimized assign time when modules are assigned to Super Modules.
- Resolved an issue where Super Module copy and paste could change the settings to group mute.
- Resolved issue with the Controller crashing if the frame was soft or factory reset while in an LP4-way Super Module.
- Resolved an issue where MaxRMS attack and MaxRMS release for Super Modules did not lock properly.
- Super Module levels meters in +4 dBu reference mode are now correctly calibrated.
- Resolved an issue where Super Modules could remain in Out of Sync also after they had been removed from work area.
- Resolved an issue where the function "Recall as virtual" made all Super Modules already on work area to become virtual.
- Resolved an issue where Amp Gain and ISVPL went back to default after an out of sync situation followed by a "Sync from computer".
- Resolved an issue where the text on the group mute buttons did not correspond to the actual group mute status.

- Resolved an issue where the SM Routing page went corrupt after virtual recalls.
- Resolved an issue where the Lake Controller crashed if a module recall was performed on an empty Super Module.
- Various minor bugs have been corrected.
- Extended number of visible characters for the frame label in the Status tab view.

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