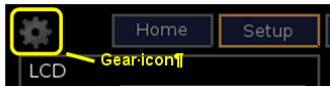
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	DEPARTMENT Engineering	CREATED BY: L. Brown	EFFECTIVE DATE November 17, 2015	REVIEWED BY: D. Eyre	

LS10 Software Updates

This document describes the latest software updates for the LS10. Software updates can be easily done on the LS10 through a USB memory stick, or through an internet connection (using a VNC viewer).

Software updates usually contain a variety of improvements, new features, and/or bug fixes. In some cases updates may affect the setup and operation. Please read the summary of updates for this release before updating the LS10. Additional information on features can be found in the LS10 Installation and Operating Guide, TM-H663.

How to Check if an Update is Required



The current LS10 software version may be found by selecting the Gear icon (setup) in the upper left corner of the LS10 Home screen. The current version is displayed in the bottom of the setup screen. If your LS10 has an earlier software version you will need to update the software to use the latest features available.

Current version: 100.03
 Build Date Tue Nov 17 14:29:26 PST 2015

Check with Datasat Digital Entertainment, Consumer Product Support at:

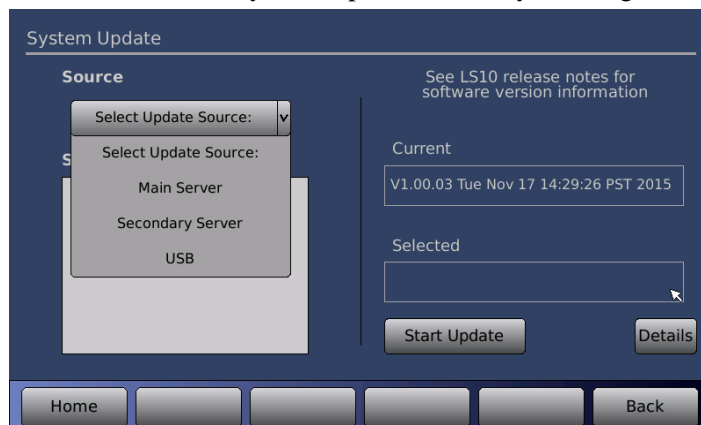
<http://www.datasatdigital.com/docs/consumer/> LS10 - Support Documents – Software for the latest update.

Software Update Procedure


Please see the LS10 Installation and Operating Guide for complete information. The easiest way to update the LS10 is through the network using a VNC connection. The LS10 can also be updated from the LS10 front panel, or via a VNC connection, using a USB memory device.

Updating to V1.00.03 through the network using a VNC Viewer

1. Login to the VNC screen for the LS10 on your computer. Note: To find the IP address of the LS10 select the gear icon on the LS10 units Home screen, then select the **Net** button. If a custom password has not been set up for the LS10, the default VNC password is the dash key “-“.
2. Once connected, select the System Update screen by entering Home → Update.



3. Using the Source pull down menu, choose Main Server, or Secondary Server. Both will provide the same information. If you successfully connect to the server a list will appear of all available software versions. The most current will always be at the top of the list. Click on the desired version to highlight it. The current version of software on the LS10 is displayed under **Current** on the right side of the screen. The highlighted software version to be loaded will be displayed under **Selected** on the right side of the screen.

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4. Press the Start Update button. The LS10 should immediately start downloading the update file. When the installation process is finished, the LS10 will automatically reboot.
5. Wait for the Home screen to appear when the reboot completes.
6. Check the Setup screen, by selecting the Gear icon, and verify that V100.03 with Build Date: Tue Nov 17 14:29:26 PST 2015 is installed.

Updating to V1.00.03 using a USB Device

1. Download the LS10 update file and copy it to a USB memory device in the root directory. The latest released version is available on the Datasat website: www.datasatdigital.com. The file may need to be unzipped. Check with Datasat Digital Entertainment Technical support for instructions if needed. The correct filename is: ciLS10v10003_rel.upd. NOTE: It is important that the only update file loaded on the USB memory device is for the LS10. Additional update files from other products may cause an error.
2. Connect the USB memory device to the USB Save/Restore connector on the rear panel of the LS10.
3. Select the update menu screen, from the LS10 front panel touch screen display, by selecting the **Gear icon** (Setup) → **USB** → **Update**.




4. The update file information will appear on the screen. Verify that it is the correct file and select the **Continue** button. The LS10 should immediately start downloading the update file. When the installation process is finished, the LS10 will automatically reboot.
5. Wait for the Home screen to appear when the reboot completes.
6. Check the Setup screen, by selecting the Gear icon, and verify that V100.03 with Build Date: Tue Nov 17 14:29:26 PST 2015 is installed.

Updates for V1.00.03 Software Release

This section describes any new features, enhancements and bug fixes that are included in V1.00.03 since the previous software version V1.00.02.

Current version: 100.03
Build Date Tue Nov 17 14:29:26 PST 2015

1. Support for new **HDMI HSR-82.2 board**. Note: HSR-82.2 supports a sub-set of the HDMI 2.0 spec. This board also supports HDCP 2.2 security on one input (input #1) and one output only (output #2). This board is currently an upgrade option on LS10:
2. **Channel Delays**: Changed resolution from 1ms to 0.1ms.
3. **EQ Menu**: Removed channel numbers, as this is inconsistent with LS10 usage; and fixed issue with incorrect channels being highlighted in the channel selector popup.

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4. **Auro Listening mode enhancement:** When changing the speaker configuration through the GUI it now adjusts the Auro Listening Mode to the best setting for that configuration.
5. Improved coefficient calculations for **parametric filters**.
6. Improved content and format of **log files**.
7. Fixed issue of missing files when saving **diagnostics** from the front panel touch screen only. Note: Saving from setup menus did not have the issue.

Updates for V1.00.02 Software Release


This section describes any new features, enhancements and bug fixes that are included in V1.00.02 since the previous software version V1.00.01.

Current version: 100.02
Build Date Wed Sep 9 09:11:26 PDT 2015

1. **HDMI:**
 - a. New firmware for HDMI HSR82 board: Ver 34 Rel 42 Rev 11
 - b. Updated HDMI Status screen to list description of 4K resolutions, and correct reporting of 4:2:0 Chroma sub sampling, when present.
 - c. Added HDMI board watchdog – restart board if error occurs.
 - d. Added "HDMIESTART" automation command which resets the HDMI interface. This addresses site-specific sequencing problems.
 - e. Added detection and correction of some HDMI related error conditions.
 - f. HDMI debug logging – allow direction of HDMI board debug information to logs or serial out to aid with trouble shooting.
 - g. Improved reliability of HDMI board firmware updating to address issue seen on a small number of boards.
 - h. Added restart of HDMI interface when decoder reports a decode error for a prolonged time.
2. **IR codes.** Added recognition of additional codes:

Function	Code
Power Off	0x25
Power On	0x26
Stereo1	0x27
Stereo2	0x28
TosLink 1	0x29
TosLink 2	0x2a
SPDIF 1	0x2b
SPDIF 2	0x2c
USB	0x2d

3. **Pink noise.** Fixed issue where channels were incorrect in some configurations for application of multiple channels.
4. Fixed processing issue of 6.1 (LCRLsRsCs) content when Auro Post processing is enabled.
5. Fixed issue with trigger out function when the **Poweron** macro is executed, on cold startup, with power-up state = OFF.
6. Updated **“USB Save > Diagnostics”** to save additional log files.

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7. Fixed an issue with InputTrim not being applied.
8. Fixed CopyEQ – **Copy EQ settings** channel to channel was only copying the first 3 filters, now copies all. **Clear EQ on all channels** was only clearing the first 3 filters, now clears all.
9. **Dolby Digital Plus:**
 - a. Fixed missing back channels when postprocessor engaged.
 - b. Changed 2.0 downmix from LtRt to LoRo.

Updates for V1.00.01 Software Release

This section describes any new features, enhancements and bug fixes that are included in V1.00.01 since the previous software version V1.00.00.

Current version: 100.01
Build Date Wed Nov 12 12:48:12 PST 2014

10. Audio Processing:

- a. Added 'Native' mode to the options for Auro-3D listening mode. Under Auro-3D Native mode, the processor decodes any Auro-3D content, but does not perform additional upmixing, or any upmixing on non-Auro-3D content.
- b. Fix handling of bitstream mono content for Auro and Neo:X.
- c. Fix an initialization problem where under certain circumstances the Auro configuration would not be properly set after a change in the primary decoder.
- d. Fix +10dB LFE boost for HDMI multichannel PCM.
- e. The DRC setting is now set to 'Off' after a factory reset.

11. GUI Updates:


- a. On the main setup screen, changed text from 'HDMI Input' to 'HDMI Video Input'. This displays when Input is set to a non-HDMI source.
- b. On the HDMI Status screen there is text that shows the 'Current' and 'Latest' firmware for the HSR card, or HDMI interface card. The 'Current' version is what is currently running in the HSR card. The 'Latest' is the version to be programmed on the HSR card after selecting the 'Update HSR Firmware' button.
- c. A fix was made for the System Info screen so that it will always correctly display the Auro version when the Auro-3D license is installed.
- d. Open Source notice available on the GUI. See Info > Notices
- e. A screen was added to allow setting the system time and date. This should be used if the time is not set through the network using the NTP server. The time and date is useful to have proper timestamps on configuration files saved from the LS10, and timestamps for the log files. To set the time and date, navigate to the screen located at System > Date/ Time.
- f. Updated the style/color of the on-screen keyboard.
- g. Changed the touchscreen display text when using Dolby ProLogic to read PLIIx or PLIIz (instead of PL2).

12. Automation / Remote Control.

- a. Fixed the noise sequencer level to be -30dB
- b. Fixed the channel noise sequence to start on Left, and fixed the order for various speaker modes.

Updates for V1.00.00 Software Release

Current version: 100.00
Build Date Thu Aug 28 12:28:12 PDT 2014

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The software version and build date shown above is the official first production release. Pre-release versions of V1.00.00, with earlier build dates, were sent out prior to August 28 2014 and should be updated.

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