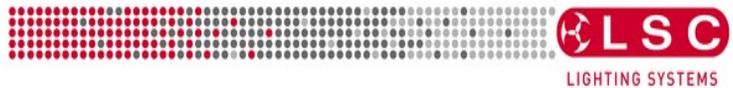


Software Release Note

RD-002-05



LSC Electronics Pty. Ltd.

Research and Development

Project Title: Advanced Power System

Software Released by: Gary Pritchard
Created: 29 October 2013
Last Modified: 19 June 2020

This document is a cumulative list of bug fixes and feature enhancements for Advanced Power System (APS) family of products.

Reporting Bugs

If you find a bug or feel that we could improve the APS, then please let us know. If you find a bug that affects operation or crashes the unit then could you let us know ASAP!!

email techSupport@lsclighting.com.au
phone +61 3 9702 8000

Obtaining Updates

If you wish to be emailed about APS software updates as they are released, then send an email to the above address and you will be added to the mailing list.

Installation procedure

To install a software update, perform the following steps:

1. Copy the software release (file named APS_vnnn.bin where 'nnn' is the software version number) into the root directory of an SD Card.
2. Insert the SD Card into the unit.
3. Tap the touchscreen to activate the menu system. Go to 'System :: Code Upgrade'.
4. The unit will reset (note that all outputs will be turned off) and the upgrade will start automatically.
5. Once complete, the unit will start automatically.

Release: v3.10 Date: 19-June-2020

Reason for the Release: Enhancements and bug fixes.

Enhancements:

- The fan is now controlled by total load on unit. Fans will go to full speed when the unit is fully loaded to 16A per channel for more than 60 seconds. Total Load is calculated once every second and the average taken over the last 60 seconds and then converted to a percentage of full load and this value is applied to the fans.
- RDM has been improved and enhanced to operate with HOUSTON X.
- Unit now powers up in Manual Mode by default.
- A user logo can now be uploaded to the APS, as per the GEN VI.
- The owners name security handling has been improved, to match that of the GEN VI

Bug Fixes:

- There were several issues with the 6 channel APS units.
Some configuration menus showed outputs 1-12 instead of 1-6;
DMX control of 6 channel units could leave a channel on when it should have been off;
A few small screen layout issues were resolved.

Release: v3.02 Date: 1-August-2018

Reason for the Release: Bug fixes.

Bug Fixes:

- Channels controlled by DMX turned on but didn't turn off.
- Although not a bug, the selection of LCD by touching the screen on power up has been removed.
- Further fixes to RDM messages.
- The touch screen may have locked up randomly and very rarely.
- The lock on an SD card was ignored (V2.0+)
- Export of files didn't work (V3.0+)
- Inserting or removing an SD card in the Import/Export menu would cause the outputs to glitch (V3.0+)
- Infinite loss time wasn't. It would take many hours but it would time out.
- The stagger start-up was irregular when very low Stagger times were used.
- When entering some values, no limit was set and with sufficient numbers it could cause the system to restart.
- If there was no high limit set on a phase, it was possible to set an invalid low limit.
- Setting DMX hold time could sometimes add extra seconds.

Release: v3.01 Date: 28-May-2018

Reason for the Release: Bug fix.

Bug Fixes:

- The buzzer doesn't work in the final release of version 3.00. This is corrected here.

Release: v3.0 Date: 22-May-2018

Reason for the Release: Improvements in switching, changes in control and bug fixes.

New Features:

- The timing of circuit switching has been changed to further minimise inrush current.
- The minimum timeout for lost DMX or contact closures has been changed to include zero.
- When updating code, the SD card is first checked for a valid file and a button now allows the user to choose whether to update or not. Previously neither of these things was checked for.
- Channel OFF and channel ON functionality has been added. It is now possible to park a channel in either the OFF or ON state. All control of the channel is ignored except that any ON channels will still turn off if the supply volts are outside the set limits.

Bug Fixes:

- On initialisation, some circuits may have come on randomly if there was no DMX present.
- On power up, it took some time before voltage limit checking occurred. This meant that it may be possible for some circuits to activate briefly before then turning off.
- If there was no SD card present when going into update, the system could white screen.
- Calibration data is now stored in E2PROM and not on the SD card. In very rare occasions if the SD card got corrupted the calibration would reset to the default values which may be inaccurate for any given device.
- If the system shutdown due to over-voltage, the fan turned off but never turned on again.
- Multiple Alarms on RDM could cause the unit to crash.
- Many RDM messages replied incorrectly (improved now that better testing tools are available).

Release: v2.0 Date: 01-Sep-2016

Reason for the Release: Addition of DMX controlled circuits.

New Features:

- Each output circuit can now be controlled by a DMX slot directly. This is the equivalent of a DMX controlled switch.

Bug Fixes:

- None.

Release: v1.03 Date: 26-Mar-2014

Reason for the Release: GPO Signal logic correction.

Bug Fixes:

- GPO signal logic (high/low) was incorrect in previous software releases.
- GPI state detection has been improved.
- Improved touch-screen accuracy.
- Increased current calibration precision.

Release: v1.02 Date: 18-Mar-2014

Reason for the Release: Support for revision 2 hardware (including Fan and Beeper).

New Features:

- Fan Speed Control implemented.
- If enabled, beeper sounds whenever Shutdown warning is active. Enabled by default.
- Power Off delay can now be set to 'Infinite'

Bug Fixes:

- In order to prevent accidental confirmation by a finger bouncing on the touchscreen swapped the following button positions:
 - 'Yes' and 'No' on the confirmation dialog ('Manual Off' and 'Reset to defaults')
 - 'Restart' and 'Reset to defaults' buttons on the Reset dialog.

Release: v1.01 Date: 08-Jan-2014

Reason for the Release: Minor bug fixes.

Bug Fixes:

- DMX View page: '<' and '>' buttons now work as expected (Mantis #1319).
- Overvoltage alarm now does not stop touch events being acted upon (Mantis #1318).
- Relay card detection improved.

Release: v1.00 Date: 29-Oct-2013

Reason for the Release:

First Public Release.

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