



ROBERT JULIAT

SULLY FIRMARE HISTORY

V5.0 Build 3651

- Added license for monitoring software.
- Implementation of the E1.37-4 FTC protocol (File upload/download and firmware update)
- Display error corrections
- Optimizations / secure bootloader in CRP2 mode
- Management of the new generation of OLED screens

V4.X Build XXXX

Corrections/Améliorations :

A very large number of changes and improvements have been made

Protocoles :

LLRP (Low Level Recovery Protocol)

Works natively regardless of the chosen business network protocol

=> Simplified network product detection/IP address modification.

Dual

When activated, the projector receives DMX frames via the Sacn and can be configured in RDM via the Artnet RDM.

Artnet

Ajout de la gestion V4 du protocole permettant à une console compatible, la gestion du flux DMX (Artnet ou Sacn) en plus du RDM en Artnet.

DMX

New engine allowing a 30 Hz refresh of the projector regardless of the frame speed sent by the console (allows a better responsiveness if the refresh rate is low on the console side).

Node

- New engine allowing a refresh rate of 30 Hz regardless of the frame speed sent by the console (allows a better responsiveness of the projectors located behind the NODE if the refresh rate is low on the console side).
- Improved RDM product discovery behind the Node => faster and more efficient way to discover projectors that respect the RDM discovery protocol, including non-RJ products (limited by software to 16 projectors).

Web Server

- Allows an automatic refresh of the web page data every 5s if you activate this mode (click refresh pictogram at the top of the page then 1).
- Display of protocols formalized "simply" in Protocol in the DATA MODE tab (with the new protocols and features listed above) with display of the incoming DMX flow for the artnet.
- Addition of the "terminator" button in the DMX protocol to enable/disable the termination resistor for white Sully projectors (a blue LED appears on the projector's DMX OUT if the termination resistor is activated).
- Improved firmware update => on revision 3.00 the customer could experience difficulties in updating the firmware via the web page. Revision 4.00 fixes this problem.
- Added a DMX line error counter in Expert mode.
- **Correction :**
 - => IP addressing that may not work in some cases.
 - => 32-character string sent creating buffer overflow
 - => Serial Number corruption in the backup structure.
 - => The serial number was refreshed at each refresh unnecessarily (error in the condition)
 - => Redesign of the warnings of the httpd part

RDM

- Added a PID allowing the activation / deactivation of the termination resistor in "Manufacturer Settings".
- Added a PID to indicate errors on the DMX frame in "Manufacturer Settings".

IHM (si l'option est choisie par le client)

- FOCUS mode on the UP button in addition to ESC (3s press required on the dedicated button).
- Setting up Dual mode.

V3.0 Build 1653

New Features :

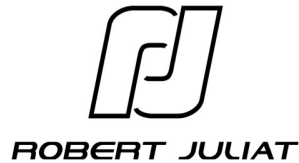
- NODE ART/RDM (3 possibilities (modification only by RDM) : mode 0: off, mode 1: dmx, mode 2 : dmx/rdm)
- RDM Discovery on DMX port at Node startup (after 20s) if Artnet node set to mode 2
- Auto Restart in case a fatal crash instead of signaling the incident with the 3x Leds in red
- Auto detection during the calibration process of the current sensor type Allegro/Texas)
- RESET function in Channel Control (DMX Value : 21 to 30)
- External HMI management

Artnet :

- Auto recognition of DHCP/STATIC IP mode at Artnet level
- Functions : ArtIpProg + ArtIpProgReply

Page Web :

- Customer can set up the Source CCT (CW or WW modify the Model ID accordingly)
- Home Page : Artnet Id, Rdm ID (Model ID), CCT, Label, Node mode



- Info reminder in the tab of the Web Page.
- Tod List in Node mode

IHM :

- Profile Mode => DMX Address on homepage
- Auto Off management
- NODE menu moved to another location
- Artnet Univers 0 (even in Artnet 3 mode) is prohibited

Corrections/Améliorations :

- Timeout change if no DMX frame (5s for all instead of 2s)
- Firmware update improvement (upload is done in 10/15s) + alert page showing the upload status and indicating if it is a pass or fail (in this case the unit restarts)
- Optimisation/Correction bugs DMX/RDM
- Optimisation/Correction bugs page WEB
- Optimisation/Correction bugs HMI
- Modification max overvoltage => set from 48V to 51V to prevent the driver going to a protection mode (Integration of V2.21)

RJNODE Integration:

- Added RJNODE fixture
- UART3 + External Flash memory

V2.21 build 1372 (Corrective Release)

- Modification max overvoltage => set from 48V to 51V to prevent the driver going to a protection mode

V2.20 build 1376

- Intégration IHM

V2.20 build 1371

- RDM : ajout sécurité si plusieurs calibrations sont demandées alors que la première n'est pas terminée (node luminex)

V2.2 27/04/21 – Official release

RDM:

- Fixed SLOT_INFO pid to be compatible with zero88 consoles

WEB:

- Fix bug when uploading firmware with web page in dhcp (reloaded a page in 0.0.0.0)

V2.107 12/04/2021

- Created check user function for description change via web page

V2.106 06/04/2021

- Redesign of RDM code (get/set) for optimization



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- Add in the queued message of the management of the modifications of parameters (used by ETC) allowing to update the pid if a modification is made via the
- modification is made via the web page or the display
- Autotest correction (exit from driver test mode)
- Improved error handling (if dac driver has immediate error)
- firmware 2.10 23/03/2021 SR

WEB page :

- Visual modification with RJ chart and black background
- Addition of feedback in SSI
- Added features and password for access to expert menu "1280".
- Creation of a dataWEB structure to manage the modifications in long processing
- Automatic reconnection to the page after modification even on network or restart

Watchdog :

- Watchdog of task : restart the network task in case of problems (loss in while 1 or loading web page too long)
- PHY watchdog : restart the phy and the network task in case of untimely reset (electro CEM discharge)
- Modification of the reinit delays of the watchdogs following the EMC and web page tests (For EMC wd_data_ETH minimum delay after CETIM : 21 sec -> choice 25 sec)

V2.0 18/01/2021 – Official Release

This is a major release.

New Features:

DMX:

- Added: control of the size of the DMX packet (sometimes a non-compliant packet passed the UART error tests producing a brief flash)
- Change in the number of DMX slots taken into account (from 7 to 2 start code included)

RDM:

- Added: PID Command_Lock to allow or not different functions in the Control Mode such as:
- RDM ON/OFF
- Added: PIDs PERFORM_SELFTEST and SELF_TEST_DESCRIPTION to test the device (8 Tests available: Temp Sensors/Power Supply/Fans/Driver/ Signal Leds Red/Signal Leds Green/Signal Leds Blue/ All Tests) a SELFTEST_RESULT Manufacturer PID was created to view the results.
- Added: Manufacturer PID CURRENT_IP_ADDRESS and CURRENT_MASK to easily find the IP address as well as the sub-network mask.
- It is possible to change the serial number via RDM (special procedure) for Service purpose.
- Added a Manufacturer PID CALIBRATION DRIVER PID for driver calibration.
- Added a Manufacturer PID to adjust and display the CUSTOM_RESPONSE_TIME
- Added a Manufacturer PID to address ARTNET and SACN universes
- Added a Manufacturer PID to select the type of Data (DMX/SACN/ARTNET/STANDALONE)
- Added a Manufacturer PID to select the type of DMX_HOLD (HOLD LAST/RESET DMX/STANDALONE)



- Added PIDs for IPV4 E1.37-2 settings.
- Added PID STATUS_MESSAGES
- Added PID MODULATION_FREQUENCY
- Added PID MAXIMUM_LEVEL
- Adding PID DISPLAY_LEVEL

Page Web :

- The possibility of addressing ARTNET and SACN universes

Error Management:

- New PSU error detection management (if an error is detected the projector stays off until the next restart). Changes in error and warning criteria.
- New fan error management (if the speed is less than 80% of the nominal speed or if it drops to 0). Reset the errors if they are temporary. If they last more than 60s the become final until the fixture restarts
- Management of the CPU card Led (at start if OK the Led goes green for 2 minutes then off otherwise the Led goes red and stays always on)
- Checking the format of the serialnumber. In case of error a message is sent by RDM through STATUS_MESSAGES and shown on the display (ARTHUR)

Network:

- Static/dynamic IP management: If switched to DHCP mode, the static IP address (and sub-network mask) is saved and displayed again if returned to static IP.

Corrections/Improvements:

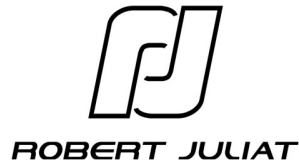
- Calibration optimization (calibration time decreases from 80s to about 10s)
- Change for RDM transport: RDM thru DMX remains functional in DMX, SACN, STANDALONE modes
- EEPROM Restoration Security: In the event of a continuous start loop due to a corruption in the function fixture.workmode, DMX is selected by default.
- DMX_HOLD function
- Output Response Time is on Medium per default value.
- Change the default fixture type 065A instead of 0650 to test per default the local potentiometer version.

RDM:

- Minor changes for displayed text in RDM
- PID Sensors
- Change: Fans description
- Change: Sensor description: ex 48V - PSU instead of 48V - SENSOR
- RDM was not working in Standalone mode.
- Factory Reset now works.

SACN:

- Unable to address a universe beyond 255.
- Possible shutdown if a RDM controller is present on the DMX input.

**ARTNET:**

- Possible shutdown if a RDM controller is present on the DMX input.
- ARTNET: If ARTNET RDM is on then RDM on DMX line is automatically deactivated (it automatically reactivates if the network is disconnected)
- Affichage version soft dans ARTNET NODE POLL REPLY

Network:

- Restores the stored IP address when switching from an auto IP address without the presence of a DHCP server (IP:0.0.0.0)

Error management:

- Adjusting the minimum speed of the CPU fan to avoid an error.
- The fan operation range has been revised (now takes into account the manufacturer characteristics for max speed and takes into account RJ parameters for min speed depending on the mode of ventilation)
- Solved issue for the Driver 115W Test mode, change driver management to 1 channel mode.
- Change: PSU voltage errors management
=>Error according to min/max threshold (existed before for min but was too low and did not exist for maximum)