



S-PLAY – Specification

Revolutionary Lighting Recorder / Controller for hassle-free, professional light shows and automated projects.



General

1. The show controller shall be a standalone playback unit with an inbuilt microprocessor, designed for the control of lighting protocol DMX512 and eDMX (Art-Net / sACN) from and triggering of commands.
2. The Show Controller / Recorder shall be a solid-state design.
3. The Show Controller / Recorder shall feature easily accessible expandable memory up to 64GB.
4. The Show Controller / Recorder shall allow for input and output of the following lighting protocols simultaneously:
 - a. 2 Universes of DMX512.
 - b. 32 Universe of Art-Net.
 - c. 32 Universe of sACN.
5. The Show Controller / Recorder shall be capable of synchronising multiple devices together to control multiple universes.
6. The Show Controller / Recorder shall allow for control from 3rd party protocols.
7. The show controller must receive triggers, send events and allow effects to be created directly from the device.

Physical

1. The Show Controller / Recorder shall have the form factor of 1U half width enclosure and include mounting accessories making it capable of being installed on a TS35 DIN-Rail, 1U 19" rack, half width rack or surface mount.
2. The Show Controller / Recorder shall feature two physical XLR5 connectors for DMX.

3. The Show Controller / Recorder shall feature a 100 Mbps Ethernet link for eDMX (Art-Net / sACN) and web interface connectivity capable of powering the device from PoE.
4. The Show Controller / Recorder shall feature four digital inputs capable of being configured as 'Trigger on Break' or 'Trigger on Make'. Additional hardware connected to the show recorder to perform this function shall not be acceptable.
5. The Show Controller / Recorder shall feature two relay outputs (NC, NO, COM). Additional hardware connected to the show recorder shall not be acceptable.
 - a. The relays shall switch currents of up to 2A.
 - b. The relays shall allow for a rating of up to 50V DC.
 - c. The relays total switchable power shall be capable of switching up to 60W.
6. The Show Controller / Recorder shall feature one DB9 connector for RS232 Serial communication.
7. The Show Controller / Recorder shall feature a forward-facing status LED.
8. The Show Controller / Recorder shall feature a full colour LCD display with navigational menu buttons.
9. The Show Controller / Recorder shall feature one forward facing USB Type A port for show backup.
10. The Show Controller / Recorder shall be powered by either PoE or a DC Input:
 - a. PoE must comply with the 802.3AF standard, devices with passive PoE will not be deemed acceptable.
 - b. The DC Input shall allow between 12 and 24v DC Input with a power draw beneath 9W.
 - c. A power supply compatible with mains power in North America, Europe, UK, and Asia shall be provided.
11. The Show Controller / Recorder shall be capable of operating in a temperature range from 0°C to 50°C (32°F to 122°F).
12. The Show Controller / Recorder shall be UKCA/CE/FCC/RoHS/WEEE compliant.

Web Interface

1. The Show Controller / Recorder shall operate a web server providing access through a dedicated local web interface without the need for additional software to record onto the device, create standalone shows, edit and playback.
2. The Show Controller / Recorder's web interface shall feature a method of viewing and controlling playlists, schedules and custom interfaces without the ability to edit playlists.
3. The Show Controller / Recorder's web interface shall feature a cue library where dynamic cues, static cues and effect cues can be created and edited without the need for separate software.
 - a. The Show Controller / Recorder's web interface shall allow for the creation of static cues / scenes.
 - i. A static cue shall be able to be captured from live incoming DMX or eDMX (Art-Net / sACN) sources.
 - ii. A static cue shall be able to be created using a UI that allows colour selection and channel values to be manually defined.
 - iii. The web interface shall allow static cues to be previewed.
 - iv. Following recording or creation, the web interface shall allow any cue to be changed, renamed, and deleted.
 - b. The Show Controller / Recorder's web interface shall allow dynamic cues to be recorded.

- i. Dynamic cues shall be able to be recorded from live incoming DMX or eDMX (Art-Net / sACN) sources.
 - ii. The show recorder shall have the ability to record cues using an Art-Net, sACN, DMX, OSC, RS232, UDP or Digital contact trigger.
 - iii. The show recorder shall allow the preview of dynamic cues.
 - iv. Once recorded, the web interface shall allow any cue to be changed, renamed and deleted.
- c. The Lighting Recorder / Controller's web interface shall feature a built-in effects generator, allowing for effect cues to be created without the need of additional software for programming LED pixels.
 - i. Once created, the web interface shall allow any cue to be changed, renamed or deleted.
- 4. The Show Controller / Recorder's web interface shall allow the following Trigger types to be defined and saved for integration into playlists:

Art-Net	RS232
Digital Inputs (GPIO)	sACN
DMX512	OSC
UDP	
- 5. The Show Controller / Recorder's web interface shall allow the following Event types to be defined and saved for integration into playlists:

Art-Net	RS232
Relays	sACN
DMX512	OSC
UDP	
- 6. The Show Controller / Recorder's web interface shall allow Cues, Trigger, and Events to be placed into a playlist.
 - a. The playlist shall be able to be edit, rename, and delete.
 - b. The playlist shall be displayed as a timeline editor.
 - i. will allow the drag and drop of Cue's, Events, and Triggers.
 - ii. will allow adjustments in increments of milliseconds.
 - c. The playlist will allow for up to four cues to be played simultaneously with a single playlist.
 - d. The playlist shall allow loop count to be defined or set to infinity.
 - e. The playlist shall provide the ability to fade the playlists in and out.
 - f. The playlist shall allow each cue to have a user defined fade in and out time.
 - g. The playlist shall allow the ability to set a start and stop trigger or start from powerup.
 - h. Multiple playlists shall be able to be played simultaneously.
- 7. The Show Controller / Recorder's web interface shall allow users to schedule content to be played.
 - a. The schedule function shall provide the ability to create, edit, rename, and delete.
 - b. The schedule function shall allow the selection of a playlist to be controlled by the schedule.
 - c. The schedule function shall allow the ability to define the number of times it is looped.
 - d. The schedule function shall allow the ability to set the command to either play or pause.

- e. The schedule function shall allow the ability to set the start time or offset from Sunrise / Sunset and provide offsets.
 - f. The schedule function shall allow the ability to set a start date, end date and number of repetitions, that the schedule will be active for be active for.
 - g. The schedule function shall allow the ability to set the frequency the schedule will be played, with options for:
 - i. Hourly.
 - ii. Daily.
 - iii. Weekly.
 - iv. Monthly.
 - v. Yearly.
 - vi. Astronomically.
1. The Show Controller / Recorder's shall have the capacity to create custom web interfaces with widgets controlling:
 - a. Play / Pause / Stop of all playlists.
 - b. Play / Pause / Stop of specific playlists.
 - c. Global intensity level.
 - d. Per playlist intensity level.
 - e. Define what interfaces link to each other.
 - f. Set a custom web interface as the device default landing page as the landing page.
 - g. Position buttons.
 - h. Define custom colours for each control.
 - i. Responsive design capable of scaling to various display resolutions.
 - j. The option to make it's root IP address redirect to a user created control interface.
 2. The Show Controller / Recorder's web interface Settings page shall provide the user with:
 - a. The ability to set the show recorders 32 Universes of output to either:
 - i. DMX512.
 - ii. Art-Net.
 - iii. sACN.
 - b. The ability to change the follow settings to the Art-Net and sACN protocols:
 - i. Refresh rate.
 - ii. Output universe.
 - iii. Destination IP.
 - c. The ability to change the refresh rate of DMX512.
 - d. The ability to define the OSC and UDP input port.
 - e. The ability to define the date, time, and location.
 - i. The Lighting Recorder / Controller shall have an Internal Real-Time clock.

- ii. The Lighting Recorder / Controller's clock shall continue to operate when external power is absent.
- iii. The Lighting Recorder / Controller shall be capable of adjusting for Daylight Savings Time.
- iv. The show recorder shall be able to calculate sunrise and sunset times based on the location.
- f. The ability to modify the following network parameters:
 - i. DHCP or static IP.
 - ii. IP address.
 - iii. Net mask.
 - iv. Gateway.
- g. The ability to synchronise multiple show controllers for larger installations by setting one as Leader and the others as Follower
- h. The ability to set to factory defaults.
- i. The ability to receive firmware updates.
- 3. The Show Controller / Recorder's web interface shall feature a status page capable of displaying:
 - a. The device network configuration.
 - b. The current output protocol settings.
 - c. The current firmware version information.
- 4. The Show Controller / Recorder's web interface shall allow editing capabilities to be hidden through use of a passcode.
- 5. The Show Controller / Recorder's web interface shall feature a backup and restore option.
- 6. The Show Controller / Recorder's web interface shall allow the monitor of DMX current value.
- 7. The Show Controller / Recorder's must hold last DMX or eDMX output value on pause.
- 8. The Show Controller / Recorder's LCD display shall allow:
 - a. Viewing and modification of network settings.
 - b. Viewing and controlling of all playlists.
 - c. Configuration backup via USB.
 - d. Firmware update from USB.
 - e. Factory reset.

Ordering Information

For further support and to browse ENTTEC's range of products visit the ENTTEC website.

Item	Part No.
S-PLAY	70092

enttec.com

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Due to constant innovation, information within this document is subject to change.