

## S-PLAY



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## Safety

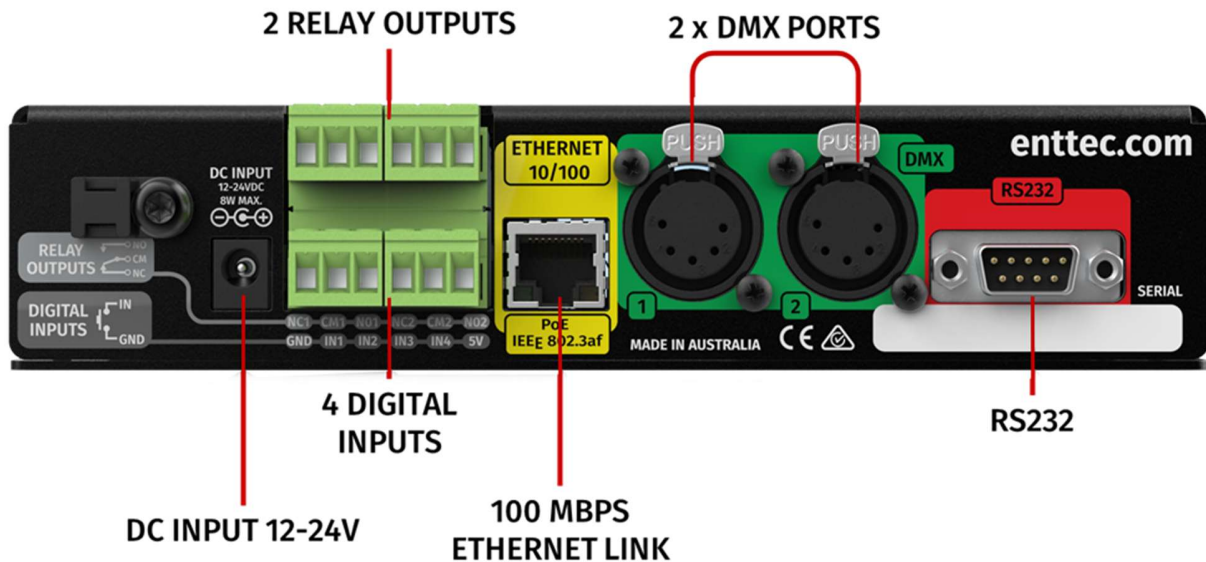
- This unit is intended for indoor use only.
- Do not expose this device to rain or moisture, doing this will void the warranty.
- Make all the connections before you plug in the mains power
- Do not remove the cover, there are no user-serviceable components inside.
- Never plug this unit into a dimmer pack
- Ensure proper earth connections
- Always be sure to mount this unit in an area that will allow proper ventilation. Allow about 6" (20 cm) between this device and a wall.
- Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, pay particular attention to the point they enter and exit the unit.

## Package Contents

When you open the packaging, you should find these items in the box:

- S-Play (70092)
- 2m cat5 cable (79102)
- 1RU mount kit (79105)
- 1 X 12V PSU adaptor with international plugs
- ReadMe Card

## Physical Features

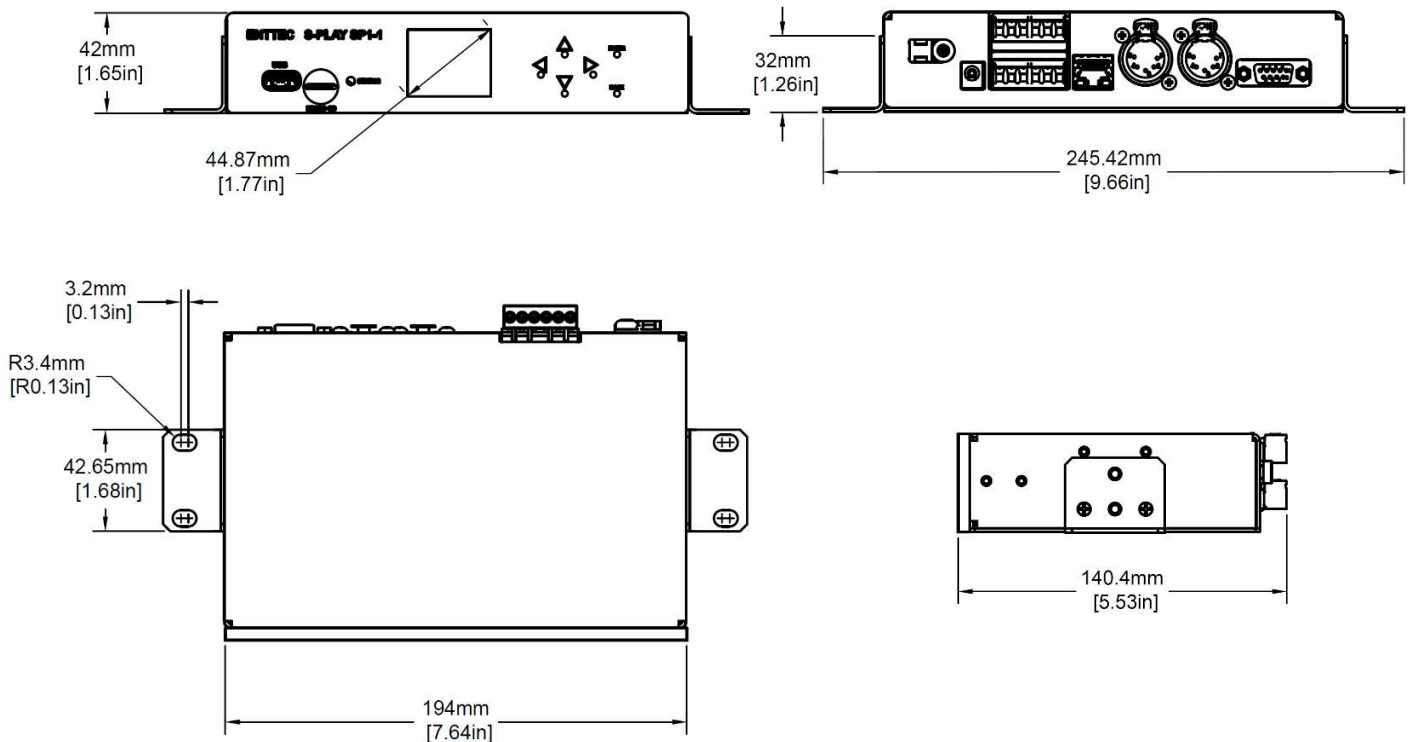


- 1U height – Half width
- Two bi-directional 5 Pin female DMX Ports
- Colour TFT LCD screen (160x128)
- Navigation LCD menu buttons
- 1 x USB Type A port
- 12 to 24v DC Input (8w max power draw) – *Power supplies over 5A should not be connected to the S-Play.*
- MicroSD card storage (Class 10 40/10 Mb/s Read/write performance)
- 100 Mbps Ethernet link featuring 802.3AF PoE
- 4 Digital Inputs (GPIO)
- 2 Relay outputs (NC, NO, COM)
- Solid-state design

# ENTTEC

## Physical dimensions

S-Play User Manual  
Part No.: 51301



### Note

All dimensions are in millimetres (mm).

## Mounting Options

The S-Play is provided with ENTTEC's, 1RU mount kit (*pn: 79105*). To provide 9.5" rack and various surface/ wall mounting solutions.



### Note

The S-Play mounting solution is not intended to be suspended above head height or audiences. Ensure all relevant legal safety guidelines are followed when installing this device.

## Software Features

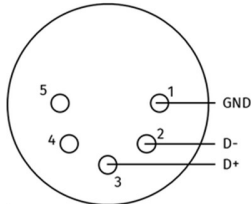
- Supports DMX512
- Supports DMX over the network protocols:
  - DMX
  - Art-Net
  - sACN
- 2 Universe DMX output or input
- Up to 32 Universe Art-Net and sACN output or input
- Create / edit DMX Scenes (static cue)
- Create / edit DMX Presets (dynamic cue)
- Preview cues being created
- Monitor the DMX values of cues being made
- Configurable output refresh rate. (Max 60FPS eDMX, 44Hz Physical).
- Make playlists from DMX Presets (dynamic cue)
- Make live recordings using DMX/Art-Net/sACN
- Schedule playlists
- Map different streams and protocols to different ports
- HTP merge between cues and playlists
- Blackout on Stop command
- Hold last value on Pause
- Remote trigger options: RS232, HTTP, OSC, GPIO, ArtNet, sACN and DMX
- HTTP and OSC API
- Lock out edit functionality using a password.



## Diagrams

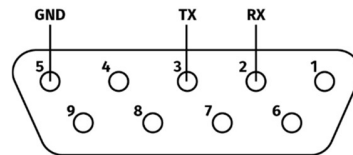
### Connector Pin-Out

#### Female XLR5 (DMX512)



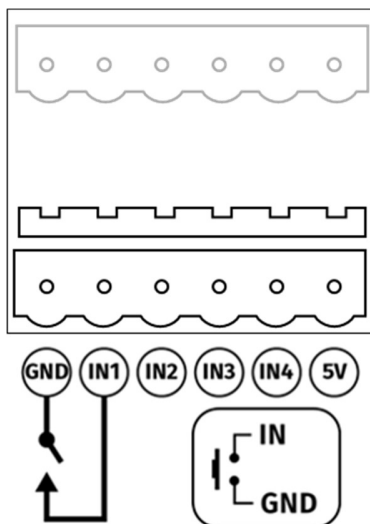
PIN	CONNECTION
1	GND
2	DATA -
3	DATA +
4	NC
5	NC

#### Male DB9 (RS232)

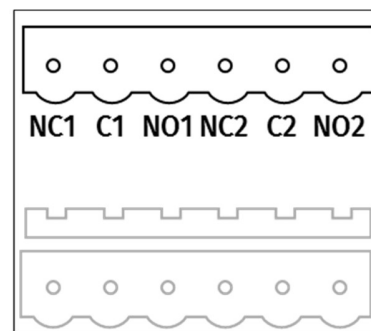


PIN	CONNECTION
1	NC
2	RX
3	TX
4	NC
5	GND
6	NC
7	NC
8	NC
9	NC

#### GPIO



#### Relay

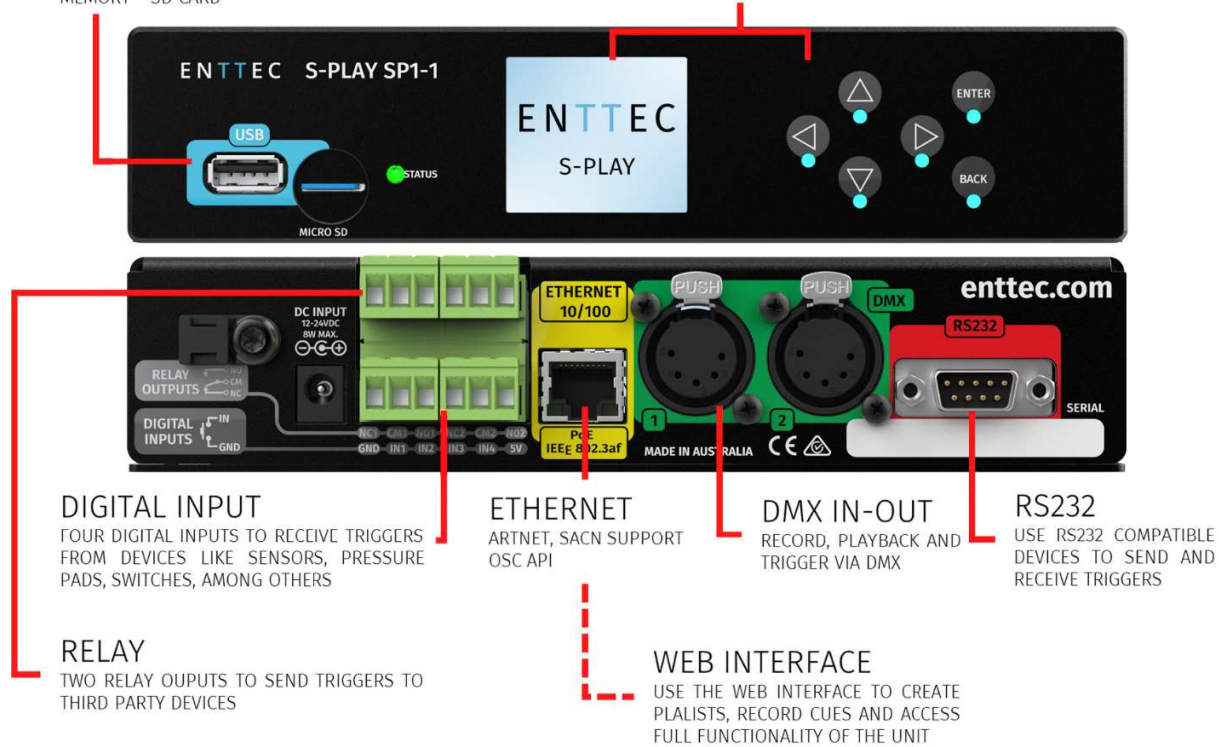


### USB

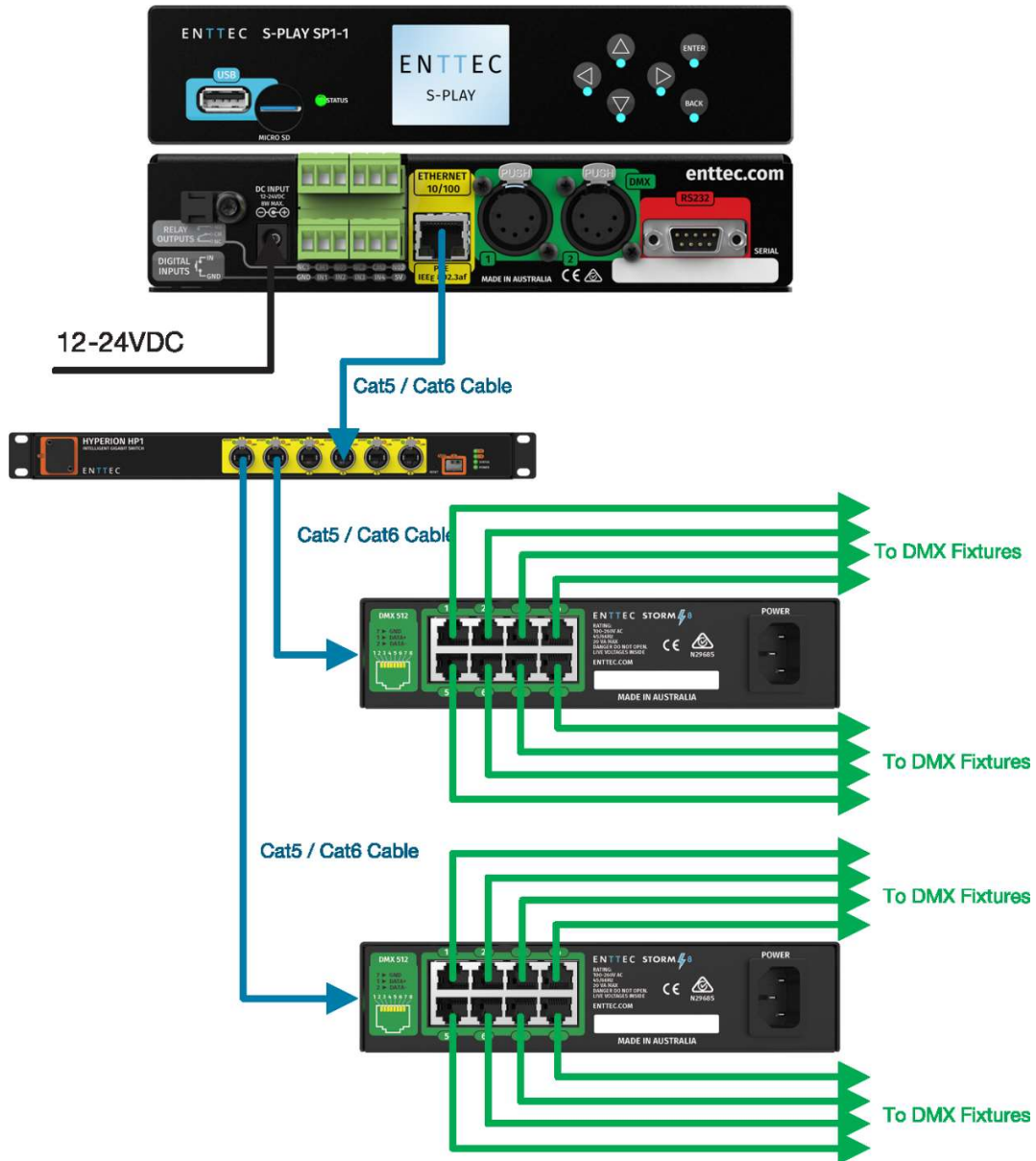
USE A USB DRIVE OR SD CARD TO BACKUP AND RESTORE FILES  
SELECT BETWEEN INTERNAL AND EXTERNAL MEMORY – SD CARD

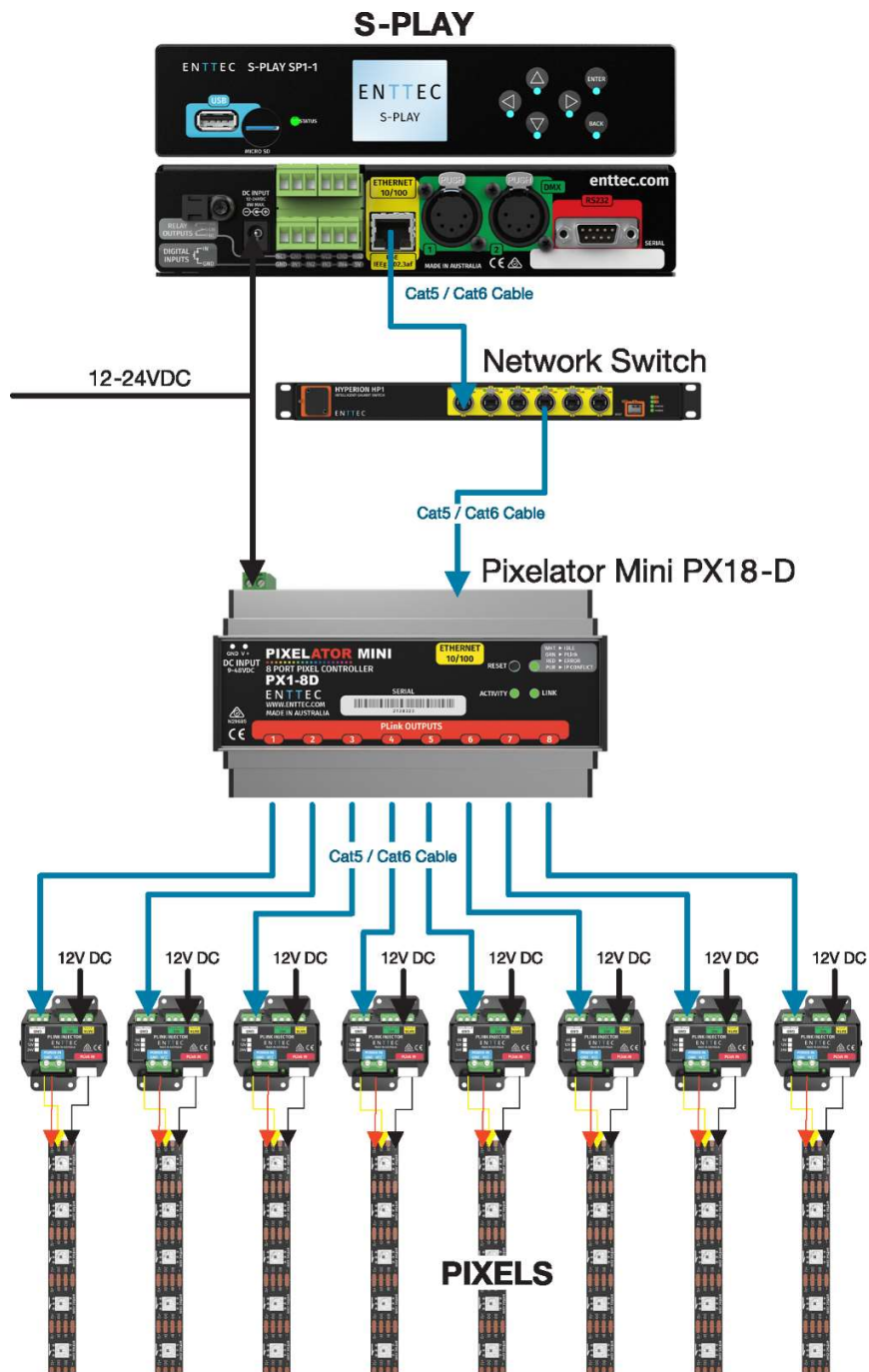
### USER INTERFACE

LCD SCREEN MENU AND NAVIGATION  
BUTTONS TO ACCESS PLAYLISTS AND CUES



## S-Play to Playback to DMX Systems

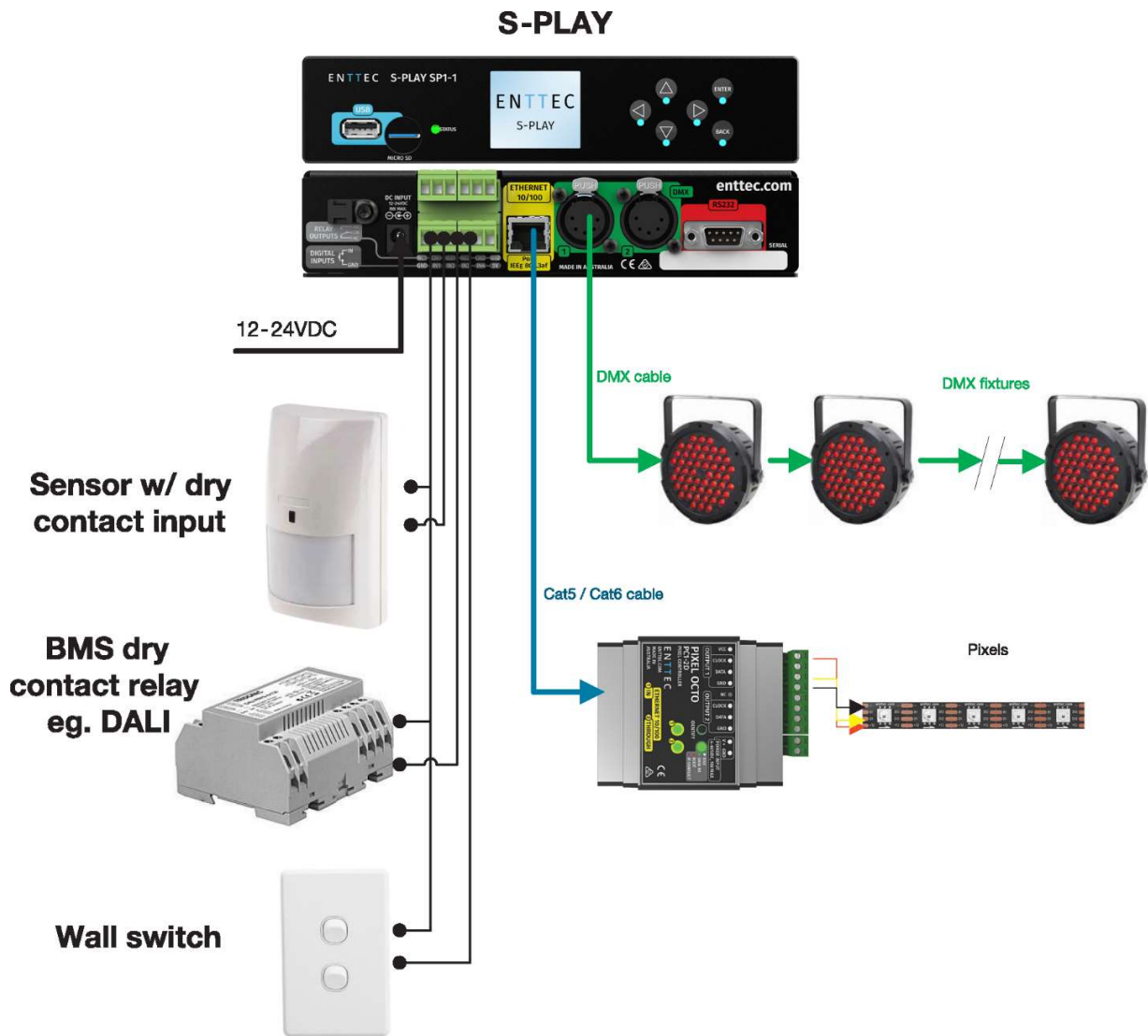




# ENTTEC

S-Play Application Diagram

S-Play User Manual  
Part No.: 51301



## Connection to Relays

The S-Play contains relays designed for use with low power devices and to provide switching logic for higher power devices.

To ensure a safe installation it is imperative that the power connected to the S-Play relays is within safe operating limits:

The S-Plays relay specifications are as follows:

Maximum Current Rating: **2A**

Maximum Voltage Rating: **50V DC**

Total switchable power of each S-Play relay: **60W.**

To calculate to total power your circuit will pass through the relay, multiply the circuit voltage by the current you intend to pass through it. This value must be lower than 60w

	Example 1	Example 2	Example 3
<b>Current</b>	<b>1.2A</b>	<b>2A</b>	<b>2A</b>
<b>Voltage</b>	<b>50V</b>	<b>30V</b>	<b>50V</b>
<b>Maximum Power</b>	<b>60W</b>	<b>60W</b>	<b>100W</b>

If your application requires mains power switching or high current applications, ENTTEC recommends the use of a DMX switch pack controlled by the S-Play's DMX output, or wire the S-Plays relay outputs to connect to the primary coil of a DIN mount high powered relay.

## Getting Started

Right out of the box, the S-Play is factory configured to:

- DHCP – *Allowing you to plug it directly into your existing router and it will receive a network address.*
- Output to DMX ports
- Update its internal clock based on the NTP server to update the date and time based on the selected time zone.

To begin your installation please follow these steps:

- Unpack the unit from the box. Inspect the S-Play for any damage that might have occurred in shipping and verify that it looks to be in good condition before plugging it into power.
- S-Play occupies a half width 1RU space, you will need to attach the mounting bracket kit included in the box to use the S-Play within a half width rack.
- Using a Cat5, Cat5e or Cat6 cable, connect the S-Play to an ethernet network.
- If the unit is connected to a compatible PoE (IEEE 802.3af) router or switch skip this step. Otherwise, use the provided AC->DC power adapter to power up the unit by plugging it into your mains outlet and the rear of the S-Play.
- Once the unit is powered on, you will be able to see its IP address on the LCD display. The IP address will be automatically assigned by the network, if connected to a DHCP network. If you are connected to a static network, navigate to the devices settings to define a static IP address to allow you connect with the unit's web interface.

## The LCD Menu

### Controls

- **Direction arrows** – Can be used to move between menu tabs and increase or decrease the value in the field with numbers such as IP address, (using the side arrows will allow numerical values to be changed in steps of 10).
- **Back**- Used to return to the main menu from a sub-menu.
- **Enter** - Used to move down to a menu, access sub-menu options, set a numerical value or select options.

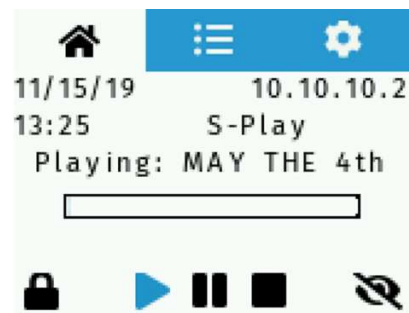
### Layout



### Home Screen

The home screen displays the following:

- Current date and time
- Device IP Address
- Device Name
- Playlist Status
- Lock Screen
- Playlist control
- Brightness control





## Playlist Screen

The playlist screen allows the user the following:

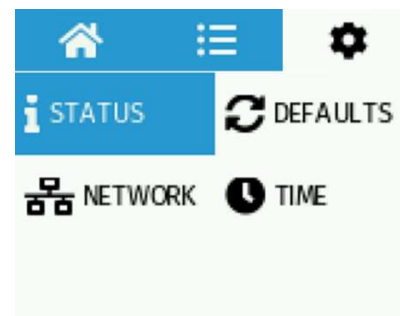
- Navigate playlists
- Play, pause and stop playlists
- Monitor playlist playback status



## Settings Screen

The settings screen allows the user the following:

- Display system status
- Change network configuration (displayed when connected to a network)
- Display time and date
- Restore to factory defaults
- Create a USB backup
- Restore a backup from a USB



To create or restore a backup from a USB you must insert a USB drive into the S-Plays front USB port and navigate to the backup and restore menu.

To load an S-Play backup onto the S-Play, the backup file must be named **splay\_backup.bak** for it to be accepted on the device.

Both backup and restore will take up to 1 minute to complete.

DO NOT remove the USB thumb drive whilst creating or restoring a backup.

## Network Discovery

To configure your S-Play you will be required to use its web interface, to find your S-Plays IP Address you can either:

### View the S-Plays LCD

1. Ensure your S-Play is physically hooked up to your network (or WiFi router) using an ethernet cable – DHCP is recommended for first time use.
2. Power up the device.
3. Monitor the LCD menu. The LCD will display the IP address in the LCD home page. If your S-Play's LCD shows 'DISCONNECTED' check even when your S-Play is set to the correct IP setting (either Static or DHCP) and power cycle the device.
4. Using a browser on a device within the same network range, type in the IP address shown on the LCD in order to access the web interface to load the S-Play web interface. All configuration can be done using the devices web page.

### Finding an S-Play's IP Address from NMU

ENTTEC provides free software (available for Windows and MacOS) called Node Management Utility (NMU) that find the S-Play and display its IP address.

**Note:** The S-Play is only supported by NMU v1.93 and above.

Please follow these steps:

1. Download NMU from [www.enttec.com](http://www.enttec.com)
2. S-Play should be connected physically by an ethernet cable to the same physical network (or router) as the computer on which you will run NMU.
3. Open NMU. If prompted to, select your computers network interface that your S-Play is connected to.
4. Press the Discovery button and wait until NMU finds all supported ENTTEC devices
5. Once found, select 'S-Play' and press 'Configure' to be directed to your S-Plays Web interface.

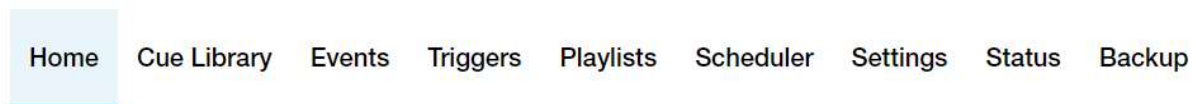
**Note:** When the S-Play is set to a static IP, the default gateway **MUST** be the same for both the S-Play and your computer for NMU to discover the S-Play.

## Web interface

The S-Play can be configured and controlled through a web browser on a computer, located on the same Local Area Network (LAN) as the device. Either click on the 'configure' button within in NMU or type the IP address (as detected by NMU e.g. 10.10.3.156) into your web browser to access the web interface.



The S-Plays web interface consists of the following pages:



## Home

The home page presents playlists and schedules to give an overview of all playback on the S-Play. This page is the default landing page of the S-Play,

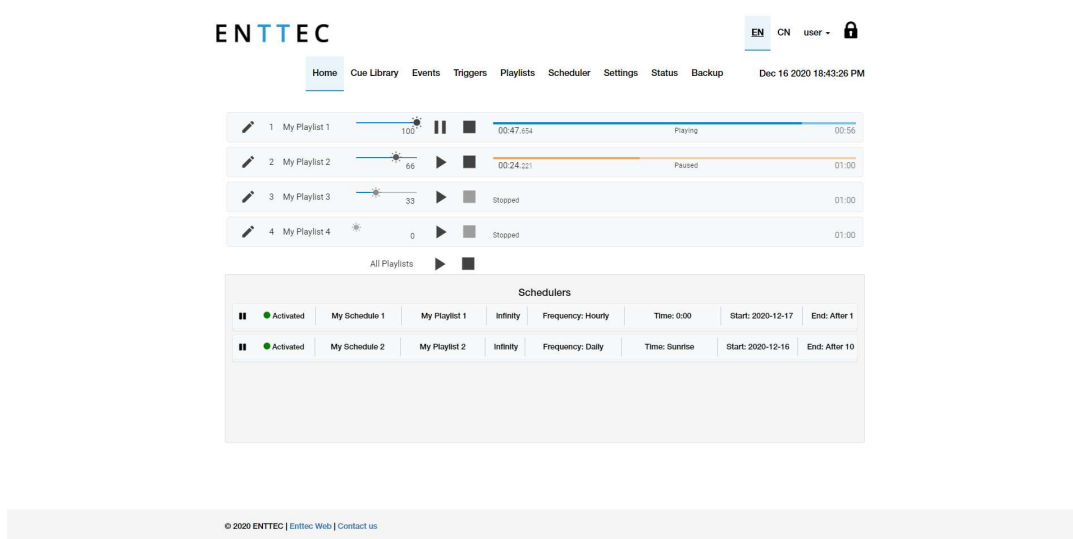
When used in combination with the **lock** function, the homepage can be used to present end users of the system a page to view all playlists and schedules:

Playlists:

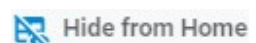
- Play, Pause, Stop, Intensity, Progress.

Schedules:

- Activate and Pause schedules



**Note:** specific playlists can be hidden from the home page by selecting the '**Hide from Home**' option when editing each playlist on the playlist page.



## Cue Library

The Cue Library consists of a list of 256 cues, which can either be **Static**, **Dynamic** or **Effects**.

- A **Static** cue is a snapshot of up to 32 universes of data captured at a given time instance.
- A **Dynamic** cue is a recording of up to 32 universes of data captured from a given time duration.
- An **Effect** cue is a cue type capable of creating internal effects from within the S-Play without requiring a DMX source (i.e. rainbow).

The Cue Library page allows the user to:

- Access all recorded or generated cues
- Preview and stop cues

ENTTEC EN CN Login

Home **Cue Library** Events Triggers Playlists Scheduler Settings Status Backup Nov 12 2019 16:00:49 PM

Show 20 Cues

ID	Name	Type	Duration
1	Cue 001	Static	0.0
2	Cue 002	Static	0.0
3	Cue 003	Static	0.0
4	Cue 004	Static	0.0

**Please select a cue to begin editing**

- 256 Cues to choose from.
- To see more cues, use Previous and Next button at the bottom, or select number of Cues shown from top.
- Order by name, number or type (Click on title to order)
- Search by cue name or ID to filter the cues
- Select the cue, and more options will appear in this area to edit Cue.
- A cue can be either Static (DMX scene) or Dynamic (DMX recording)
- To save the cue either Edit Scene or Record

Once this page is accessed on the Web UI, playback will be stopped.

## Events

The events page allows:

- Access all event options
- Create, edit and delete events

ENTTEC EN CN Login

Home Cue Library **Events** Triggers Playlists Scheduler Settings Status Backup Nov 12 2019 16:01:11 PM

Show 20 Controls

ID	Name	Protocol
1	Event 000	N/A
2	Event 001	N/A
3	Event 002	N/A
4	Event 003	N/A

**Events are commands that are sent from S-Play using the desired protocol.**


- 128 Events entries to configure
- To see more events, use the navigation buttons on the bottom of the page
- Click the name of the column to sort the list
- Search by event name, protocol type or event ID
- Click on the event row to display options
- Once saved, you can use the events in the Playlist Page.

## Triggers

The triggers page allows:






- Access all trigger options
- Create, edit and delete triggers

### ENTTEC

EN CN Login 

Home Cue Library Events **Triggers** Playlists Scheduler Settings Status Backup May 27 2020 16:57:25 PM

Show  Controls

ID 	 Name 	 Protocol 
1	Trigger 000	N/A
2	Trigger 001	N/A
3	Trigger 002	N/A
4	Trigger 003	N/A

Triggers are commands that the S-PLAY will wait for before activating a playlist.

- A list of 128 Triggers allowing for configuration
- To see more triggers, use the navigation buttons at the bottom of the page or increase the quantity displayed per page.
- Click the name of the column to sort the list
- Search by trigger name, protocol type or trigger ID
- Click on the trigger row to display options
- Once saved, you can use the trigger in the Playlist Page.

## Playlists

The Playlists page is where playlists can be created by combining Cues, Events and Triggers onto the timeline. Using the tools made available it is possible to:

- Create, Edit, Rename and Delete Playlists.
- Access to all Playlists.
- Play, Pause and Stop Playlists.
- Re-order Playlists.
- Hide certain playlists from the home page.
- Define loops.
- Define fade time.
- Define start and stop triggers or to start from start up.

The screenshot displays the ENTTEC S-Play web interface. At the top, the ENTTEC logo is on the left, and language options (EN, CN) and a login button are on the right. Below the logo is a navigation menu with items: Home, Cue Library, Events, Triggers, Playlists (highlighted), Scheduler, Settings, Status, and Backup. The date and time 'Dec 17 2020 10:20:37 AM' are shown in the top right corner.

The main content area is titled 'All Playlists' and features a play button and a stop button. Below this is a search bar and a row of colored buttons for 'Static cue', 'Dynamic cue', 'Effects', 'Events', and 'Triggers'. The main area contains a large empty box for the playlist list.

On the right side, there is a detailed view of a selected playlist. It shows a name field, start and stop triggers (both set to 'No Trigger'), a play count of 'Infinity', an internal priority of '100', and a group of '0'. There are also fields for 'Fade in' (0.000) and 'Fade out' (0.000).

At the bottom, there is a timeline with a scale from 00:00 to 01:00. The timeline shows several cue points and triggers, with labels for 'Events' and 'Triggers'.

At the bottom of the page, there is a footer with the text: © 2020 ENTTEC | [Enttec Web](#) | [Contact us](#)

## Scheduler

The scheduler page allows the user the following:

- Access all schedules
- Play and pause schedules
- Monitor status of the schedule
- Create and edit schedules

The screenshot displays the ENTTEC Scheduler interface. At the top, the ENTTEC logo is on the left, and navigation links for EN, CN, Login, and a lock icon are on the right. A menu bar includes Home, Cue Library, Events, Triggers, Playlists, Scheduler (highlighted), Settings, Status, and Backup. The current date and time, Dec 18 2020 10:57:14 AM, are shown on the far right.

The main content area features a message: "No Registered Schedules". Below this is a "Create New Scheduler" form. The form includes a "Schedule Name" field with the placeholder "New Name here...". It has a "Select Playlist" dropdown menu currently set to "- Select a Playlist -". The "Loop" field is set to 4 with a refresh icon. The "Command" dropdown is set to "Play". The "Start" field is set to "2020-12-18" with a calendar icon. The "Time" dropdown is set to "Time" and the "0:00" field is set to "0:00". The "End" field is set to "2020-12-18" with a calendar icon and an information icon. The "After" field is set to "1" and the "Repetitions" field is empty. The "Frequency Type" section has radio buttons for Per Second, Per Minute, Hourly (selected), Daily, Weekly, Monthly, Yearly, and Astronomical. A text input field contains "Every 1 Hour(s)". At the bottom of the form are "Save Scheduler" and "Delete" buttons.

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## Settings

The settings page allows the user the following:

- Set S-Play Outputs
- Configure ArtNet and sACN output universes and destination IP's
- Configure output protocol refresh rate
- Configure DMX output ports
- Define the OSC Input Port
- Set the date, time and location
- Change the S-Play's network configuration
- Reset to factory defaults
- Update firmware



**Note:** Do not downgrade firmware version without consulting the ENTTEC support team first. Downgrading, firmware version may result in playlists, schedules to operate as intended.





### S-PLAY Outputs

Default Configurations

Universe 1:	ArtNet 1	Universe 2:	ArtNet 2	Universe 3:	ArtNet 3	Universe 4:	ArtNet 4
Universe 5:	ArtNet 5	Universe 6:	ArtNet 6	Universe 7:	ArtNet 7	Universe 8:	ArtNet 8
Universe 9:	ArtNet 9	Universe 10:	ArtNet 10	Universe 11:	ArtNet 11	Universe 12:	ArtNet 12
Universe 13:	ArtNet 13	Universe 14:	ArtNet 14	Universe 15:	ArtNet 15	Universe 16:	ArtNet 16
Universe 17:	ArtNet 17	Universe 18:	ArtNet 18	Universe 19:	ArtNet 19	Universe 20:	ArtNet 20
Universe 21:	ArtNet 21	Universe 22:	ArtNet 22	Universe 23:	ArtNet 23	Universe 24:	ArtNet 24
Universe 25:	ArtNet 25	Universe 26:	ArtNet 26	Universe 27:	ArtNet 27	Universe 28:	ArtNet 28
Universe 29:	ArtNet 29	Universe 30:	ArtNet 30	Universe 31:	ArtNet 31	Universe 32:	ArtNet 32

[Update Outputs](#)

### ArtNet

[Configure Art Net](#)

### sACN

[Configure sACN](#)

### DMX Output

Refresh Rate:  fps

[Update DMX Settings](#)

### OSC Settings

OSC Input Port:

[Update OSC Settings](#) [Export Playlists](#)

### Date & Time

Set Date Manually:  Off

Date:

Time:  :

Time Zone:

[Update Clock](#)

### Location

GMT offset:  Hrs:  Min:

Latitude:

Longitude:

Calculated: Sunrise: 21:47 Sunset: 04:44

[Update Location](#)

### Network Interface

DHCP:  Off

IP Address:  .  .  .

Net Mask:  .  .  .

Gateway:  .  .  .

[Update Network Settings](#)

### Reset to Factory Defaults

Click **RESET TO FACTORY DEFAULTS** to clear all user-entered configuration and reset this S-Play to factory defaults. After resetting, the:

- Web Passwords will return to their default setting
- The IP address will be set to DHCP
- All cues, playlists events and triggers will be wiped.

Warning: Factory resetting this device is irreversible and will wipe all data previously entered on this device.

[Reset to factory defaults](#)

### Firmware Update

Note: Do not downgrade firmware version without consulting the ENTTEC support team first. Downgrading, firmware version may result in playlists, schedules, events and triggers not operating as intended. Always perform a backup before updating firmware version.

Upload New Firmware:

## Status

The status page displays:

- Network information of the device
- Current output protocols
- System information including:
  - System status
  - Playlist activity
  - CPU status
  - Storage status
  - Device name
  - System uptime
  - Hardware ID
- Software version information
  - Firmware version

Network Information ⓘ	
IP Address:	10.0.0.25
Subnet Mask:	255.0.0.0
Broadcast Address:	10.255.255.255
Mac Address:	00:50:C2:08:1A:36
Serial No.:	0050c2081A36

Output Information ⓘ											
	Universe 1	Universe 2	Universe 3	Universe 4	Universe 5	Universe 6	Universe 7	Universe 8	Universe 9	Universe 10	Unive
Protocol	ArtNet	ArtNet	ArtNet	ArtNet	ArtNet	ArtNet	ArtNet	ArtNet	ArtNet	ArtNet	ArtNe
Universe	0	1	2	3	4	5	6	7	8	9	10
IP Address	Broadcast	Broadcast	Broadcast	Broadcast	Broadcast	Broadcast	Broadcast	Broadcast	Broadcast	Broadcast	Broac

System Information ⓘ	
System Status:	<span style="color: green;">✔ STARTED</span> <span style="margin-left: 20px;">STOP ENGINE</span> <span style="margin-left: 20px;">REBOOT</span>
Activity:	No Playlist is Playing
CPU Status:	Load: 1.3 %    Temp: 38.9 °C
Disk Space:	<div style="border: 1px solid #007bff; padding: 2px;">5.82 % used</div> SD (Internal) <span style="float: right; color: green;">8.0 GB free out of 8.5 GB</span>
System Name:	S-PLAY
System Uptime:	2 hours, 15, minutes
Hardware ID:	1651660c04424264

Software Information ⓘ	
Software Version:	1.3.0
OS Build date:	Fri 08 May 2020 09:35:05 AM UTC
Web Version:	20201218.5
Engine Version:	20201218.2
DMX Driver Version:	1.5

## Backup

The backup page allows the user the following:

- Settings backup
- Restore
- Storage location selection

### Settings Backup

Creating a backup allows restore the files from this S-Play to other devices on the same firmware version.

Backup Includes:

- Settings
- Cues
- Events and Triggers
- Playlist
- Schedules

Backups of complex shows can take a maximum of 60 minutes to compress and save.

To save a web backup, click on the .bak file generated to download it to your computer.

**Note:** If planning to restore a backup to an S-Play via USB rename it to splay\_backup.bak first.

[Backup](#)

### Restore

**Note!** Please ensure you are using the correct file  
For example: *backup\_IP\_Address.bak*

**Warning!** Restoring will **REPLACE** all current network settings & cue/playlist configuration on this unit.

[Browse](#) [Restore Settings](#)

## Record

To record Cues, select any cue in the library as shown in the image below.

The screenshot shows the ENTTEC web interface. At the top, there is a navigation menu with 'Home', 'Cue Library', 'Events', 'Triggers', 'Playlists', 'Scheduler', 'Settings', 'Status', and 'Backup'. The 'Cue Library' tab is active. Below the navigation, there is a search bar and a table of cues. The table has columns for ID, Name, Type, and Duration. The first row is highlighted in blue, indicating it is selected. To the right of the table, there is a form for editing a cue. The 'Cue Name' field contains 'Cue 001' and the 'Cue Type' dropdown is set to 'Static Scene'. There are two buttons: 'Edit Scene' (blue) and 'Clear Scene' (red).

ID	Name	Type	Duration
1	Cue 001	Static	0.0
2	Cue 002	Static	0.0
3	Cue 003	Static	0.0
4	Cue 004	Static	0.0

Select the cue type to be recorded or created:

- **Static**
- **Dynamic**
- **Effects**

The S-Play allows previews of recordings or effects to be played back without the need to create a playlist.

### Recording Pointers:



During ArtNet or sACN recording, ensure that no other active ArtNet/sACN device is outputting (including the S-Play). This will eliminate the chance of interference loopback that can lead to jumpy or incorrect recordings.

The S-Play actively outputs the same internal universes as it is recording in real-time. For best practice configure your DMX input universes to be different to the output universes on the S-Play Settings page, or the outputs on the settings page are set to **'NONE'** to stop any data conflict.

When recording using the physical DMX ports, ensure the DMX ports are not already configured to be outputs on the Settings page. – If a DMX port is configured to be an output it will be unable to receive data.

## Static Cue

When creating a Static Cue ensure you follow the recording pointers at the beginning of this section to configure your S-Play correctly.

1. Select Static Scene as the cue type
2. Press edit scene button
3. Provide cue name to aid identification
4. Select one of the following options for data capture:
  1. DMX (up to 2 Universes / 1024 Channels)
  2. Art-Net (up to 32 Universes / 16,384 Channels)
  3. sACN (up to 32 Universes / 16,384 Channels)
5. Specify the universes for capturing data
6. Once the option for capturing is selected (either manually defined or a live snapshot), press on the capture button to take a snapshot of your input data at a specific time.

**Toggle All Inputs** – Selects all input universes

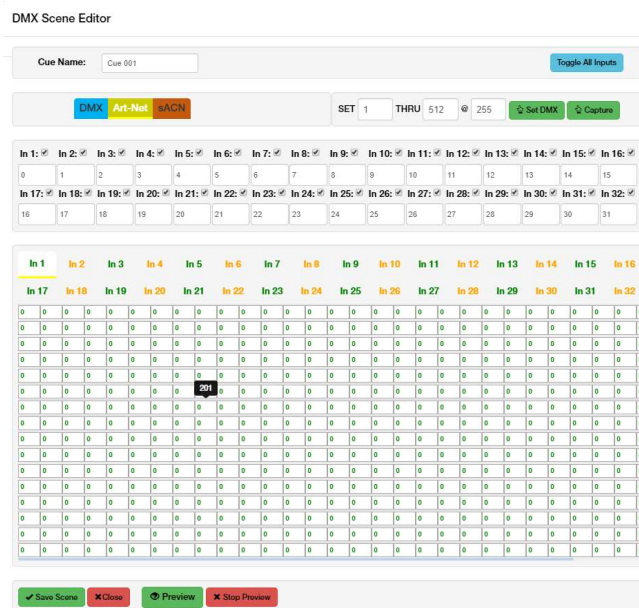
**Save Scene** - used to save the cue created

**Close** - Close edit window without saving

**Preview** – Observe the capture using DMX ports. This will stop any current playbacks

**Stop Preview** – Stop output of captured data through DMX ports

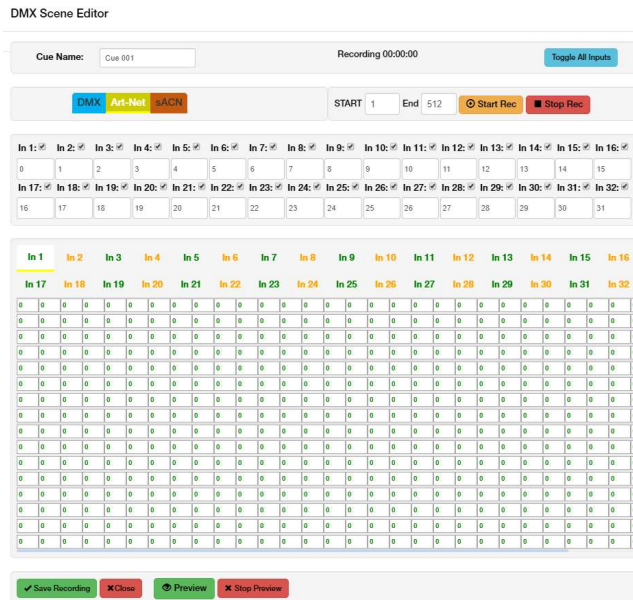
The DMX values captured will be shown for the corresponding universe, as shown in the image below:



## Dynamic Cue

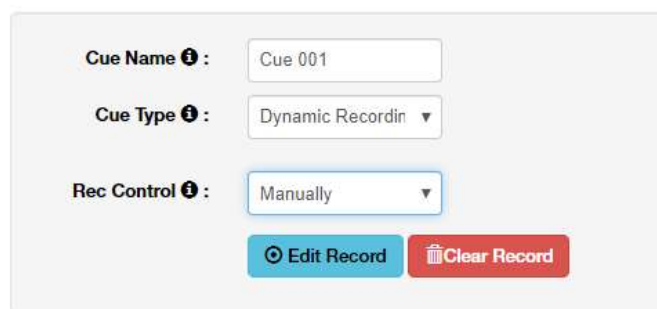
Dynamic Cue recording can be started manually or by sending an ArtNet trigger.

*When carrying out a recording ensure you follow the recording pointers at the beginning of this section to configure your S-Play correctly.*



## Manual Recording Control

1. Select Dynamic Scene as the cue type
2. Select **Manually** from the Rec. Control option
3. Press the **Edit Record** button



4. Provide cue name to aid identification
5. Select one of the following options for data capture:
  1. Snapshot DMX (up to 2 Universes / 1024 Channels)
  2. Snapshot Art-Net (up to 32 Universes / 16,384 Channels)
  3. Snapshot sACN (up to 32 Universes / 16,384 Channels)

6. Specify the universes for capturing data
7. Once the option for capturing is selected, press on the start rec button to start the recording. The timer in the right bottom part of the window should start running as soon as data is captured.

The DMX values captured will be shown for the corresponding universe.

**Toggle all inputs** – Selects all input universes

**Save scene** - used to save the cue created

**Close** - Close edit window without saving

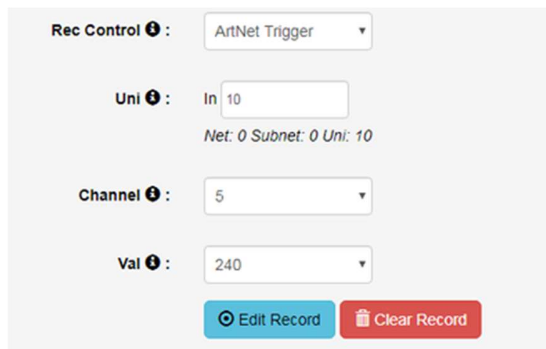
**Preview** – Observe the capture using DMX ports. This will stop any current playbacks

**Stop Preview** – Stop output of captured data through DMX ports

**N.B.** During Art-Net or sACN recording check that no active output is broadcasting from your S-Play to eliminate unwanted frame loopback.

## ArtNet Recording Control

1. Select Dynamic Scene as the cue type
2. Select **ArtNet Trigger** from the Rec. Control option
3. Set the desired universe, channel and value to activate the trigger



4. Press edit record button
5. Provide cue name to aid identification
6. Select one of the following options for data capture:
  1. Snapshot DMX (up to 2 Universes / 1024 Channels)
  2. Snapshot Art-Net (up to 32 Universes / 16,384 Channels)
  3. Snapshot sACN (up to 32 Universes / 16,384 Channels)
7. Specify the universes for capturing data
8. Once the option for capturing is selected, press on the start rec button to start the recording.
9. S-Play will wait then for the trigger to be active before it starts recording
10. The timer in the right bottom part of the window should start running as soon as the Trigger is active, and data is captured

The DMX values captured will be shown for the corresponding universe.

**Toggle all inputs** – Selects all input universes

**Save scene** - used to save the cue created

**Close** - Close edit window without saving

**Preview** – Observe the capture using DMX ports. This will stop any current playbacks

**Stop Preview** – Stop output of captured data through DMX ports

**N.B** During Art-Net recording, ensure no active Art-Net output is broadcasting to eliminate frames loopback, which leads to the incorrect recording.

**N.B.** The Art-Net trigger will be active, once the value of the channel is equal to or greater than the value set in the trigger.



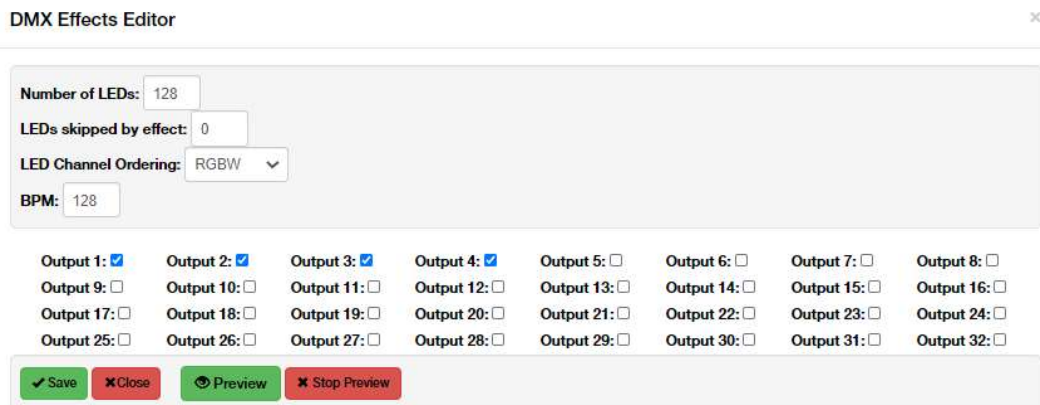
## Effects

1. A slot from the Cue Library
2. Provide cue name to aid identification
3. Select your desired effect type within the **Cue Type** field.
4. Press the **Edit Effect** button



The screenshot shows a form with two input fields. The first field is labeled 'Cue Name' with an information icon and contains the text 'Cue 001'. The second field is labeled 'Cue Type' with an information icon and contains a dropdown menu with 'Rainbow Effect' selected. Below the fields are two buttons: a blue 'Edit Effect' button and a red 'Clear Effect' button.

5. Configure your desired effects using the onboard parameters. – The S-Plays colour effects have been primarily designed around LED and RGBW fixtures.



The screenshot shows the 'DMX Effects Editor' window. It features a parameter configuration section with the following fields: 'Number of LEDs' (128), 'LEDs skipped by effect' (0), 'LED Channel Ordering' (RGBW), and 'BPM' (128). Below this is a grid of 32 output checkboxes, with the first four (Output 1-4) checked. At the bottom, there are four buttons: 'Save', 'Close', 'Preview', and 'Stop Preview'.

6. Effects are applied on a per universe basis and do not cascade across multiple. – Select each of the S-Plays universes that you wish to apply the effect to
7. After the parameters have been set, the S-Play allows effects to be previewed using the **Preview** button.
8. Once happy with the effect created this can be Saved to the S-Plays memory.

## Playback

### Preview Cue

- Select a Cue within the **Cue Library** and enter edit mode.
- Click **Preview Cue**.
- The **Cue** is previewed on the selected output ports as defined within the S-Plays **Settings** page.

When previewing a cue, be sure to stop the preview when done.

### Editing a Cue, Effect or Dynamic Recording

After a cue has been created, the option to edit it is available when selecting the cue in the Cue Library, please note this directly overwrites the full universe values received and extends the length of the cue if necessary.

If you wish to subtract elements from a static scene, effect or dynamic recording (*i.e. remove universes or individual channels from the recording, shorten the length of a dynamic cue*) this cannot be done using the edit function. Clear the scene and start again. Clear the recording and re-record.

Once a cue begins being edited. Discarding a cue will reset it to default values. If you have entered edit mode, but do not want to make changes, press **save**.

## Playlists

The playlist page allows the user to add multiple cues (static or dynamic), events and triggers in a sequence to be stored and played back at any given point.

### Playlists Page Layout

The screenshot shows the ENTTEC Playlists page layout. At the top left is the ENTTEC logo. On the top right, there are language options (EN, CN), a Login button, and a lock icon. Below this is a navigation menu with items: Home, Cue Library, Events, Triggers, Playlists (highlighted), Scheduler, Settings, Status, and Backup. The current date and time are shown as Dec 17 2020 10:20:37 AM.

Label A points to the ENTTEC logo. Label B points to the 'All Playlists' control with play and stop buttons. Label C points to the search bar and filter tabs: Search, Static cue, Dynamic cue, Effects, Events, and Triggers. Label D points to the main playlist editor area. Label E points to a detailed attribute panel for a selected cue, showing fields for Name, Start Trigger, Stop Trigger, Play Count, Internal Priority, and Hide from Home. Label F points to the timeline navigation controls, including zoom in/out, play, stop, and save icons. Label G points to the media track timelines, showing four tracks with a volume of 100. Label H points to the event track, and label I points to the trigger track.

At the bottom of the page, there is a footer: © 2020 ENTTEC | Enttec Web | Contact us

The playlists page is comprised of 9 key elements:

**A.** Created Playlists (*all playlists are shown here*)    **B.** Global Playlist Control

#### Playlist Editor

**C.** Search and Filter Bar

**D.** Attribute Library

**E.** Playlist Attributes

**F.** Timeline Navigation

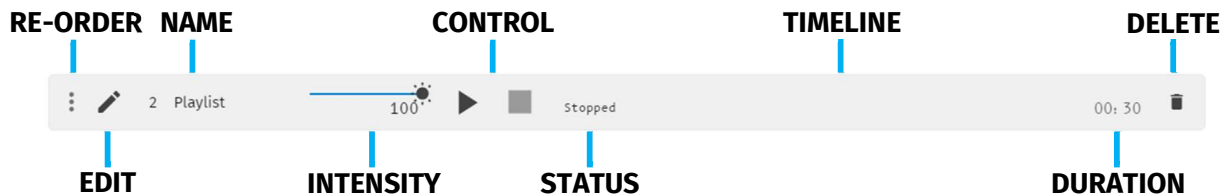
**G.** Media Track Timelines

**H.** Event Track

**I.** Trigger Track

## Created Playlists

This section lists all the playlist created. The section displays basic information like the playlist name and duration and gives basic control over a playlist.



**Reorder:** Drag and drop the playlist from the three dots rearranging your playlist (this will be reflected on the Home Page).

**Edit:** Loads the playlist in the timeline and media tracks for editing

**Name:** Displays the ID (set internally) and name of the playlist set in the Playlist Attribute section.

**Intensity:** real-time control of the master intensity of the playlist. By default, it is set to 100% and it can be changed when the playlist is playing.

### Controls - Play/Pause, Stop

**Play:** Play the selected playlist, also the Playlist is loaded into the timeline and media track section.

**Pause:** Pause the selected playlist. By pausing a playlist, S-Play holds the las DMX value.

**Stop:** Stops the selected playlist. By stopping a playlist, S-Play stops outputting any data (set DMX value t 0).

**Status:** Shows the status of the playlist. It can be: *Playing, Paused, Stopped, Waiting for Trigger.*

**Timeline and Duration:** Shows the playback state of each playlist. Once the playlist has completed playing, it stops outputting data. Opacity of this bar matches the playlist intensity.

**Delete:** Deletes the playlist and schedules where the playlist is used in

## Global Playlist Control

Gives control over all playlists. When pressing play on the global control, all the playlists start playing. If there are conflicts in channels, the values are merged on a Highest Takes Precedence (HTP) basis.

## Search and Filter Bar

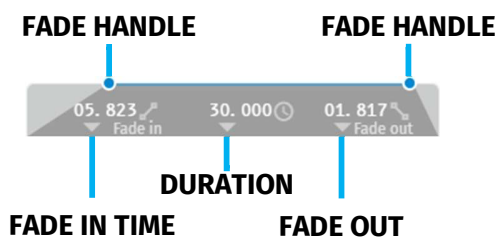
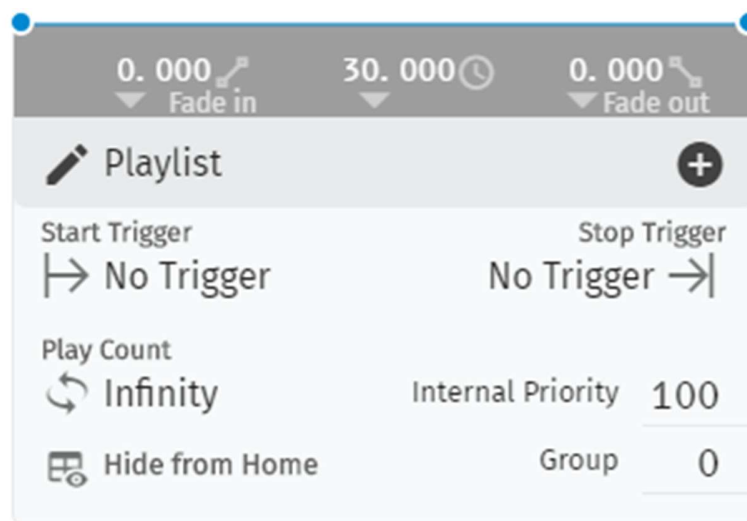
This box contains all Cues Events and Triggers Stored on the S-Play. To create a new Playlist, select "Create New Playlist" from the list. This entry will always be the first entry of the menu.

## Available Cues and Controls

Lists all the media that can be used in the playlist. It is categorized by Static Cues, Dynamic Cues, Effects, Events and Triggers.

To use any media, drag and drop the desired cue into any of the media tracks. Please note that triggers and events have dedicated tracks.

## Playlist Attributes



**Name:** Set the name of the playlist.

**Internal Priority:** when playing multiple playlists, for any conflict between channels, the playlist with higher priority will drive the output. If the playlist has the same priority the channels will merge following HTP (Highest takes precedence) method.

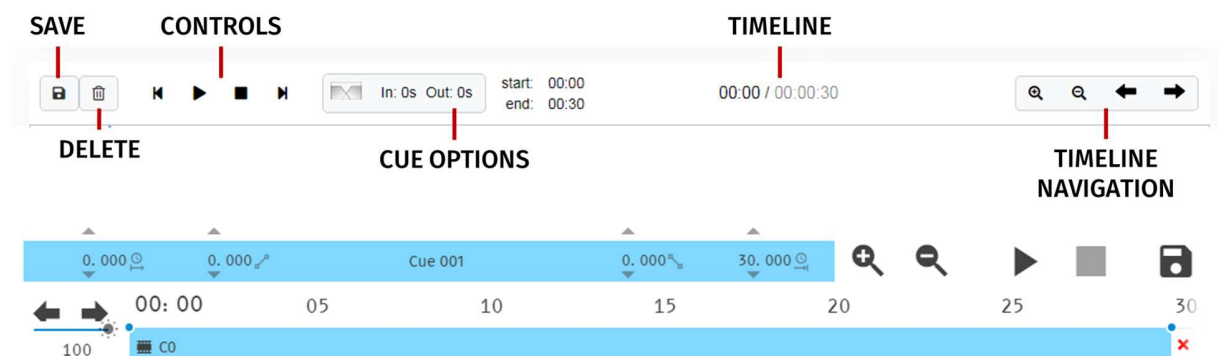
**Loop:** Determine the number of times that the playlist will play until it stops

**Group:** Define a group of playlists to override the output. Groups with the highest hierarchy drive the S-Play's output when the groups of the same number have universe conflicts the S-Play references Internal Priority.

**Start Trigger:** A list of triggers set in Triggers page, except "On Power Up" which triggers playlist right after Splay is powered on. These triggers are used to start the playlist. To use this feature, select a Trigger from the dropdown menu; the Playlist will play by either pressing play or activating the trigger.

**Stop Trigger:** A list of Triggers set in Triggers page. These triggers are used to stop the playlist. To use this feature, select a Trigger from the dropdown menu; the Playlist will stop when the trigger conditions are met.

## Playlist Settings



**Save:** Saves any change on the Playlist. S-Play will ask to save any change before playing a Playlist.

**Delete:** Deletes the playlist loaded in the Playlist Editor

**Control:** Gives navigation and playback over the playlist loaded in the Playlist Editor

**Cue Options:** Options for any cue added into the cue track. The cue options are also active when a cue in the cue track is selected.

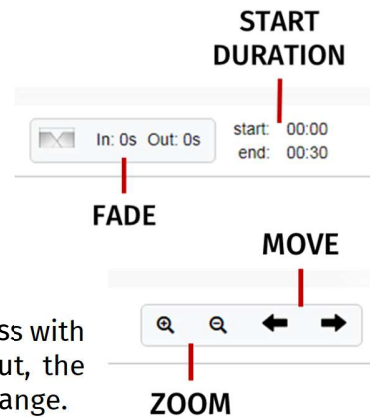
**Fade:** Set the fade in and fade out time for a cue. It will go from 0 to max intensity in the set period.

**Start/Duration:** Manually add the start time for the selected cue. On a static cue, you can change the duration by also editing the end time. On a Dynamic cue, the duration is set according to the recording.

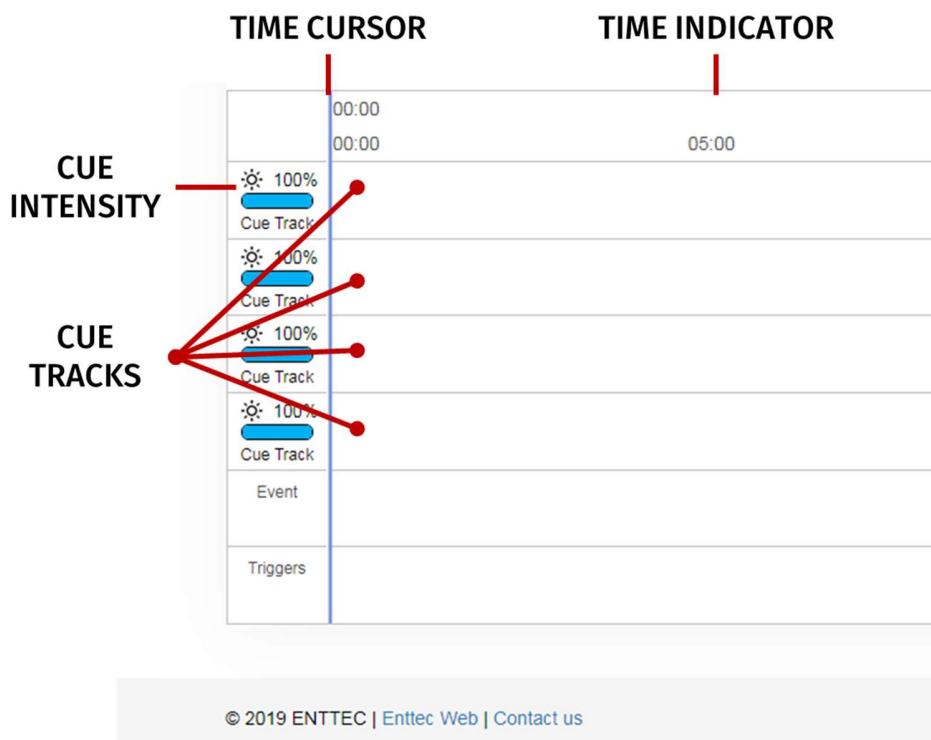
**Timeline:** Shows the current time of the playlist out of the total duration of it.

**Timeline navigation:** Zoom in and Out using the magnifying glass with the plus and minus symbol. Note that when you zoom in/out, the values in the timeline change and the size of the cue boxes change.

Use the arrows to move on time in the playlist timeline.



## Playlist Timeline and Media Tracks



S-Play has 4 different cue tracks where any cue from the playlist media section can be dragged on.

**Intensity:** Each track has its own intensity and it affects all the media on the same level.

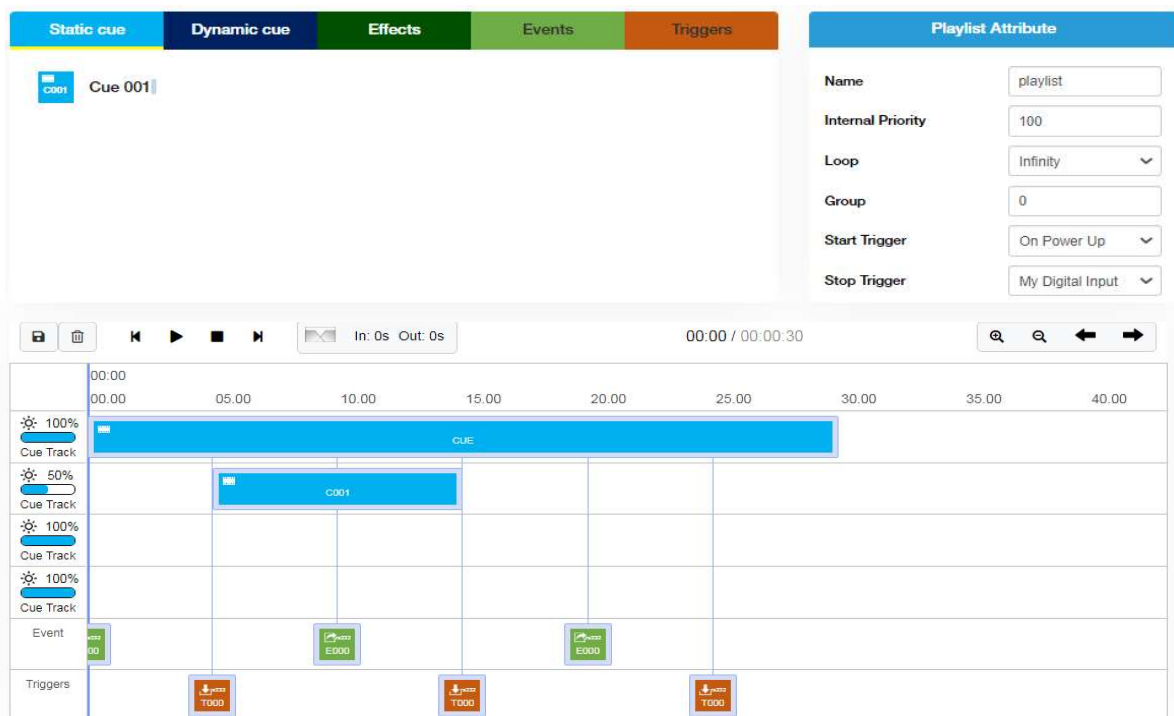
**Cue tracks:** Drag and drop media to this section. To remove a cue from the tracks, select the cue and click on the red **x** next to the right edge of the box.

When playing multiple media at the same time. i.e. 2 cues on 2 different tracks, S-Play will use HTP (Highest value Takes Priority) merging.

## Event and Trigger Tracks

These tracks are reserved for events and triggers respectively. The vertical line shows the exact moment playlist will pause to wait for the trigger to be active, or the playlist executes the event. When using triggers, the playlist pauses and holds the last value on the output. To continue, activate the selected trigger or press play again.

## Example Playlist



This example is showing a playlist named "playlist" that will start on power up and will loop until manually stopped (Loop: Infinity)

The static cue "CUE" will play while sending an RS232 Event. By second 5 the playlist will pause and wait for the GPIO trigger to be sent an C001 will start playing with 50% intensity. The playlist will then continue sending Events and waiting for triggers. At second 30 it will loop back sending the first RS232 Event out.





## Control

### Events

Use events to allow integration between S-Play and other devices. S-Play can send commands over multiple protocols and interact with Relays.

#### RS232

Make sure the receiver has the correct communication setup:

- Baud rate: 9600
- Data: 8bit
- Parity: None
- Stop: 1bit
- Flow Control: none

**N.B.** ASCII Command text limited to 32 Characters only.

The screenshot shows the 'Control Options' interface for RS232. It includes a 'Control Name' field with 'RS232 Event', a 'Type or Protocol' dropdown set to 'RS232', and a 'Command' text box containing 'BR140'. A light blue information box contains the following text: 'Trigger will send entered RS232 Command , when activated.', 'RS232 Communication information Baud rate : 9600, Data : 8 bit, Parity : none, Stop: 1 bit, Flow Control: none', and 'Command text is limited to 32 characters only.' At the bottom, there are 'Save Control' and 'Reset Control' buttons.

#### DMX

Send a value over a specified channel on the DMX port of your choosing.

Set the following:

- DMX Port
- Channel
- Value

The screenshot shows the 'Control Options' interface for DMX. It includes a 'Control Name' field with 'DMX Event', a 'Type or Protocol' dropdown set to 'DMX', and three dropdown menus: 'DMX Port' set to 'Port 2', 'Event Channel' set to '20', and 'Event Value' set to '72'. A light blue information box contains the text: 'When activated, S-Play will send selected DMX value over the specified port and channel'. At the bottom, there are 'Save Control' and 'Reset Control' buttons.

## ArtNet

Unicast or broadcast a value over a specified channel and universe over Art-Net

Set the following:

- IP Address (if unicasting)
- Output Universe
- Channel
- Value

## sACN

Unicast or multicast a value over a specified channel and universe over sACN.

Set the following:

- IP Address (if unicasting)
- Output Universe
- Channel
- Value

## Relay

Control the relay action

- NO: Normally Open
- NC: Normally Closed

**N.B.** On system power-up, the Relays position is set to be normally open.

## Triggers

Use triggers to take control of the timeline of the playlist. When using a trigger, the timeline will pause until the selected trigger is active.

Triggers can be used to start a playlist or at any point within the timeline.

When a playlist is waiting for a trigger, it will play by either activating the trigger or by pressing play. This way there is full control of the playback even when the triggers are not available.

## OSC

The S-Play can receive OSC through two key methods:

1). Triggers that can be created to start and resume playlists.

2). Integration with the S-Plays OSC API to enable control of:

- Master intensity
- Play, pause and stop all playlists
- Play, pause and stop individual playlists
- Per-playlist intensity control

The screenshot shows the 'Control Options' form for an OSC Trigger. It includes a 'Control Name' field with the value 'OSC Trigger', a 'Type or Protocol' dropdown menu set to 'OSC', and a 'Command' field with the value '/s-play/play'. A light blue information box contains the following text: 'Trigger will be ready, when, entered Command is matched.', 'Command must be received on UDP Port configured in OSC Settings.', and 'OSC Command must start with leading / sign.'. At the bottom, there are two buttons: 'Save Control' (blue) and 'Reset Control' (red).

Within the S-Plays Settings page, the global OSC receive port can be set, in addition to an 'Export Playlists' button that exports the ID's of each playlist for use within the OSC API.

Visit [www.enttec.com](http://www.enttec.com) to download the OSC API.

## RS232

RS232 Communication settings:

- Bad Rate: 9600
- Data: 8bits
- Parity: none
- Stop: 1bit
- Flow Control: None

**N.B.** Command text is limited to 32 Characters only.

The screenshot shows the 'Control Options' form for an RS232 Trigger. It includes a 'Control Name' field with the value 'RS232 Trigger', an 'Output Type' dropdown menu set to 'RS232', and a 'String' field. A light blue information box contains the following text: 'A Trigger will be activated when an incoming command matches the user defined RS232 command.', 'RS232 communication information Baud rate : 9600, Data : 8 bit, Parity : none, Stop: 1 bit, Flow Control: none', and 'Command text is limited to 32 characters only.'. At the bottom, there are two buttons: 'Save Trigger' (blue) and 'Reset Trigger' (red).

## DMX

DMX trigger will be active when the trigger value is equal and greater than the selected trigger value.

Set the following:

- DMX Port
- Channel
- Value

**N.B.** If DMX is selected as output protocol in the setting page, the DMX triggers will be disabled in the playlist.

## Digital Input

S-Play has 4 Digital input ports to activate triggers. **The triggers will be activated when the digital input is in low position (normally closed).** If the input remains on low position while the timeline goes over the trigger, the playlist won't pause.

Use GPIO triggers with sensors, pressure pads, wall switches, etc.

## Art-Net

Art-Net trigger will be active when the trigger value is equal and greater than the selected trigger value.

Art-Net trigger can be unicasted or broadcasted to S-Play.

It is recommended not to use the same universe used in playback.

Set the following:

- Input Universe
- Channel
- Value

## sACN

sACN trigger will be active when the trigger value is equal and greater than the selected trigger value.

sACN triggers can be either unicasted or multicast to the S-Play.

It is recommended not to use the same universe used in playback.

Set the following:

- Input Universe
- Channel
- Value

The screenshot shows the 'Control Options' configuration window for an sACN Trigger. The 'Control Name' is set to 'sACN Trigger' and the 'Type or Protocol' is set to 'sACN'. A light blue information box contains the text: 'When used in a playlist, S-Play will wait to receive the selected DMX value over the specified sACN Universe and Channel'. The 'sACN Uni' is set to 150, the 'Trigger Channel' is set to 9, and the 'Trigger Value' is set to 216. At the bottom, there are two buttons: 'Save Control' (with a checkmark icon) and 'Reset Control' (with a trash can icon).

## Schedule

To set up a schedule you need to create a playlist first. The scheduler will play the playlist at a set time until the end condition is met. i.e. *PlaylistA* can be played every day on sunset from the 1<sup>st</sup> of February until the last Friday of October.

The playlists played by the scheduler will play next if there is a playlist playing when the initial condition is met. In the previous example, if S-Play is playing *PlaylistB* right before sunset, S-Play will wait for it to finish to play *PlaylistA* set in the scheduler.

Give attention to the setup of Date & Time and Location settings for the correct work of Schedulers.

## ENTTEC

The page has 7 different sections:

a. Created Schedules

### Scheduler Editor

b. List of Schedules

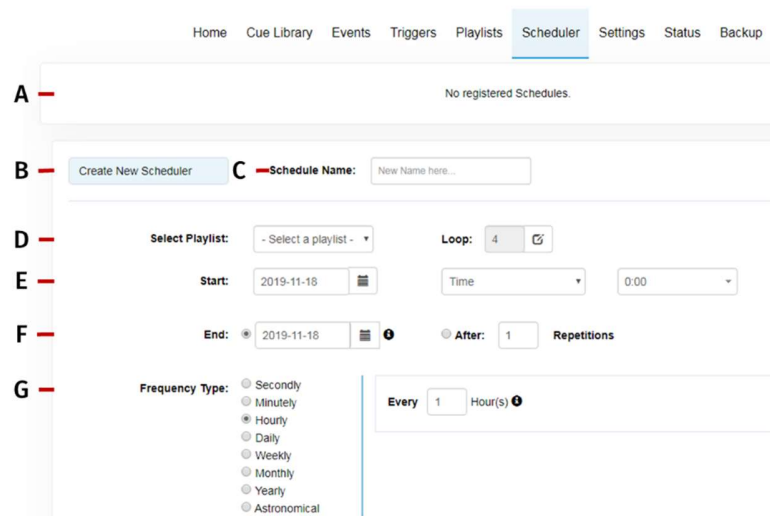
c. Schedule name

d. Selected playlist

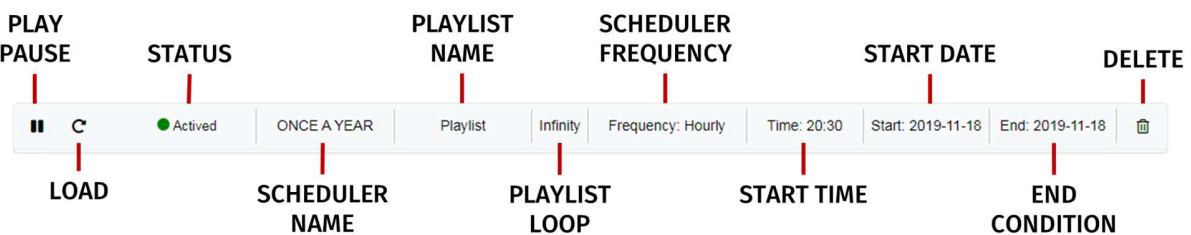
e. Start condition

f. End condition

g. Frequency type



## Created Schedules



The created schedulers list gives information at a glance of the parameters set on each scheduler.

**Pause/Play:** Gives control of the scheduler. If a scheduler is paused, the status light will become yellow.

**Load:** Load scheduler into the Scheduler Editor to update or change any parameter

**Status:** Displays the status of the scheduler

- Green: Active Scheduler. An active scheduler still has instances to play
- Red: Expired Scheduler. An expired scheduler does not have any instances left to play.

- **Yellow:** Paused Scheduler. The scheduler will not play until it's active and the end condition is not met.

**Scheduler name:** Name set in the scheduler editor

**Playlist name:** Playlist selected in the scheduler editor

**Play Count:** Play Count is set in the scheduler editor, by default this is the same value configured in the playlist attributes.

**Scheduler frequency:** frequency set in the scheduler editor

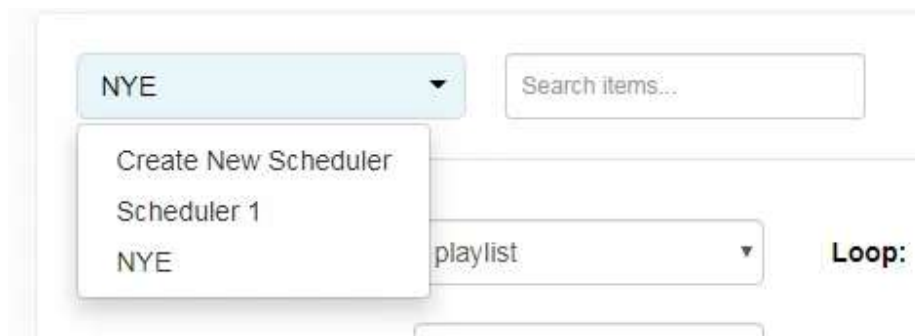
**Start time:** Time set in the scheduler editor

**Start date:** Start date set in the scheduler editor

**End condition:** End condition set in the scheduler editor. To set an infinitely looping schedule, set the end time to be identical to the beginning

**Delete:** Delete selected scheduler

## List of Schedules



Lists all the schedules saved and shown in the created scheduler section. When an option is selected, its parameters are loaded into the scheduler editor.

To create a new scheduler, select "Create New Scheduler" option.

## Schedule Name

Name to aid Schedule identification.

## Selected Playlist

List of available Playlist to be scheduled.

## Start Condition

Set a schedule to start at a specific time, at sunrise or sunset. The sun phase is calculated based on the location set in the settings page. It takes into consideration:



- GMT Offset
- Latitude
- Longitude

To set the start of the scheduler to a specific time do the following:

- Select “Time” from the dropdown menu
- Click the first two digits on the second dropdown menu and set the hour using the dial. Note that the inner circle show hours past noon (>12) and the outer circle show hours before noon (1AM to 12).

The screenshot displays the scheduler configuration interface. It includes a 'Start' date field set to '2019-11-18', an 'End' date field set to '2019-11-19', and a 'Time' dropdown menu set to '20:30'. Below these are fields for 'After' (set to 1) and 'Repetitions'. A 'Frequency Type' dropdown menu is open, showing options: Secondly, 1.Minutely, Hourly (selected), Daily, Weekly, 1.Monthly, Yearly, and Astronomical. The 'Every' field is set to 1 'Hour(s)'. Two circular dials are shown: the top one for hours (with an inner circle for hours past noon and an outer circle for hours before noon) and the bottom one for minutes. The top dial has '20' selected on the inner circle, and the bottom dial has '30' selected.

- To set the minutes, click on the last two digits and use the dial to select the desired time.

## End Condition

The scheduler will be expired once the end condition is met. It can be on a specific date or after a desired amount of repetitions.

## Frequency Type

Set the frequency when the playlist set will play.

- Frequency Type:
- Per Second
  - Per Minute
  - Hourly
  - Daily
  - Weekly
  - Monthly
  - Yearly
  - Astronomical

Every  Second(s) ⓘ

Save Scheduler

Delete

## Per Second

Start the selected playlist after the specified seconds.

## Per Minute

Start the selected playlist after the specified minutes.

## Hourly

Start the selected playlist after the specified hours.

## Daily

Start the selected playlist either every day or every number of days specified.

- Frequency Type:
- Per Second
  - Per Minute
  - Hourly
  - Daily
  - Weekly
  - Monthly
  - Yearly
  - Astronomical

Every Day

Every  days

Save Scheduler

Delete

## Weekly

The selected playlist will play on the selected days every week or as specified in the text box. In the example, the playlist will play every week on Wednesdays and Tuesdays.

**Frequency Type:**

- Per Second
- Per Minute
- Hourly
- Daily
- Weekly
- Monthly
- Yearly
- Astronomical

<input type="checkbox"/> Monday	<input type="checkbox"/> Tuesday
<input type="checkbox"/> Wednesday	<input type="checkbox"/> Thursday
<input type="checkbox"/> Friday	<input type="checkbox"/> Saturday
<input type="checkbox"/> Sunday	

## Monthly

The selected playlist will play a specific day of every month as specified. In the example above, the playlist will play the 1<sup>st</sup> Day of every month.

**Frequency Type:**

- Per Second
- Per Minute
- Hourly
- Daily
- Weekly
- Monthly
- Yearly
- Astronomical

Day 1 of every 1st month

The 1st Monday of every 1st month

## Yearly

The selected playlist will play a specific day of the year. In the example above, the playlist will play every year on the 1<sup>st</sup> of January.

**Frequency Type:**

- Per Second
- Per Minute
- Hourly
- Daily
- Weekly
- Monthly
- Yearly
- Astronomical

The January 1

On the 1st Monday of January

## Astronomical

The selected playlist will play depending on the phase of the moon. In the example above, the playlist will play every new moon.

**Frequency Type:**

- Per Second
- Per Minute
- Hourly
- Daily
- Weekly
- Monthly
- Yearly
- Astronomical

New Moon

First Quarter

Full Moon

Third Quarter

## Setup

### Changing the Network Settings

#### Changing the Network Settings Using LCD Interface

1. Use the up or down navigation buttons located next to the screen to move to the Settings tab
2. Use the down button to navigate to the Network settings page

The Network page can be used for the following:

- Enable or disable DHCP
- Set static IP value
- Set netmask
- Set Gateway



Use the arrows and enter keys to get the desired network settings

#### Setting an IP

1. Toggle between DHCP and Static by pressing enter to change options and the up-down arrow to change between options
2. Press the Enter button to select and confirm each field of the IP address
3. Use the arrows to assign a number for each byte in IP; press on the right-left arrow to move in increments of 10, or use the up-down arrow to move in increments of one.
4. Once the desired IP is set, press enter button to move to Netmask settings
5. Repeat step 3 to set the desired netmask.
6. Once desired netmask has been set, press enter to specify the gateway settings – (this can be set to any IP on the same Subnet as your S-play if a gateway is not required)
7. Press Enter to move out of network settings;
8. Use the arrows to navigate to the **OK** button and press **Enter**
9. All network settings assigned will get saved once the **OK** button is selected

## Change IP Using the Web Interface

Change the Network settings between DHCP and Static IP, Netmask and Gateway.

After modifying an IP address, it is good practice to power cycle the S-Play device.

Network Interface ⓘ

---

DHCP:  Off

---

IP Address:  .  .  .

---

Net Mask:  .  .  .

---

Gateway:  .  .  .

---

[Update Network Settings](#)

Network Interface ⓘ

---

DHCP:  On

---

[Update Network Settings](#)

## S-Play Output

Change outputs independently between ArtNet, sACN and DMX.

S-PLAY Outputs ⓘ All Artnet ▾

Universe 1:	DMX Port 1 ▾	Universe 2:	DMX Port 2 ▾	Universe 3:	ArtNet 3 ▾	Universe 4:	ArtNet 4 ▾
Universe 5:	ArtNet 5 ▾	Universe 6:	ArtNet 6 ▾	Universe 7:	ArtNet 7 ▾	Universe 8:	ArtNet 8 ▾
Universe 9:	ArtNet 9 ▾	Universe 10:	ArtNet 10 ▾	Universe 11:	ArtNet 11 ▾	Universe 12:	ArtNet 12 ▾
Universe 13:	ArtNet 13 ▾	Universe 14:	ArtNet 14 ▾	Universe 15:	ArtNet 15 ▾	Universe 16:	ArtNet 16 ▾
Universe 17:	ArtNet 17 ▾	Universe 18:	ArtNet 18 ▾	Universe 19:	ArtNet 19 ▾	Universe 20:	ArtNet 20 ▾
Universe 21:	ArtNet 21 ▾	Universe 22:	ArtNet 22 ▾	Universe 23:	ArtNet 23 ▾	Universe 24:	ArtNet 24 ▾
Universe 25:	sACN 1 ▾	Universe 26:	sACN 2 ▾	Universe 27:	sACN 3 ▾	Universe 28:	sACN 4 ▾
Universe 29:	None ▾	Universe 30:	None ▾	Universe 31:	None ▾	Universe 32:	None ▾

↻ Update Outputs

Use the Default configurations option in the top part of the section to Select between Art-Net, sACN, DMX or No Output.

## ArtNet Output Configuration

- Configure output refresh rate for all ArtNet output stream
- Set output ArtNet each of the 32 universes
  - Universe
  - Unicast IP address
  - Broadcast
- Save after any change by pressing "Update ArtNet"

Art-Net ⓘ

Refresh Rate: 44 ▾ fps

Output:

ArtNet 1: 0 Net:0 Subnet:0 Universe:0

Unicast IP: 192 . 168 . 0 . 1

ⓘ Update Art-Net

SUCCESS. Art-Net updated successfully. ✕

**N.B.** max refresh rate = 60FPS

## sACN output configuration

- Configure output refresh rate for all sACN output stream
- Set output sACN each of the 32 universes
  - Universe
  - Unicast IP address
  - multicast
- Save after any change by pressing "Update sACN"
- Generate sACN ID
- Set S-Play sACN priority

**N.B.** max refresh rate=60FPS

## Change Date/Time and Location

Set time, date and location. This information is critical when setting schedules.

When the **Set Date Manually** is off and the S-Play is connected to an NTP server, the S-Play will automatically update the system time information upon power-up.

If the S-Play's system time is set manually the S-Play will stay locked to a set time. The user must manually update the time to reflect daylight saving time twice a year.



## Factory Reset

A factory reset can be undertaken using either the web interface or LCD providing the user account is logged in. Performing a factory reset will result in:

- The Network settings returning to DHCP
- All cues, playlists and schedulers stored internally will be deleted
- The output universes will return to Art-Net
- Art-Net output will be set to Broadcast
- sACN output will be set to multicast

Always take a backup before undertaking a factory reset.

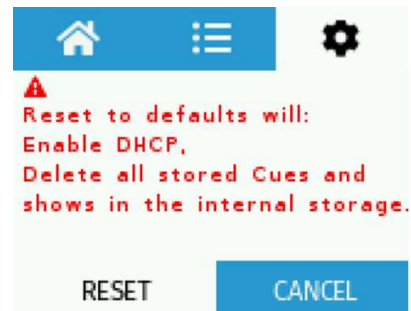
**Note:** -Once a factory reset has been started the process will not stop until completion.  
-Do not remove power from the S-Play whilst a factory reset is in progress.



Following a successful factory reset and the S-Play re-booting, ENTTEC recommends removing power for 10 seconds, then re-plugging your device. Once it boots navigate to a 404 page on the device by modifying the URL to a page that doesn't exist on the S-Play (i.e. <http://10.0.0.100/en/404/>). This will automatically clear its web cache.

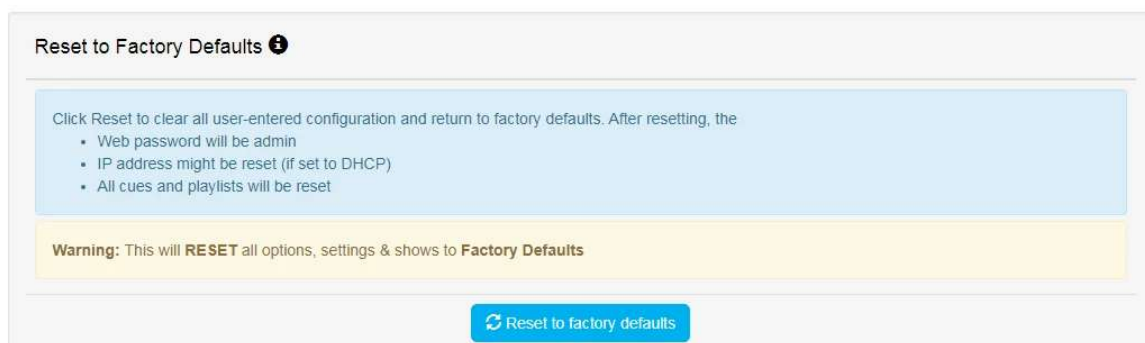
### Factory Reset Via LCD

- Navigate to settings
- Locate Reset to Defaults
- Select "RESET"



### Factory Reset Via Web Interface

Go to settings page, scroll down to the end of the page and click "Reset to factory Defaults"



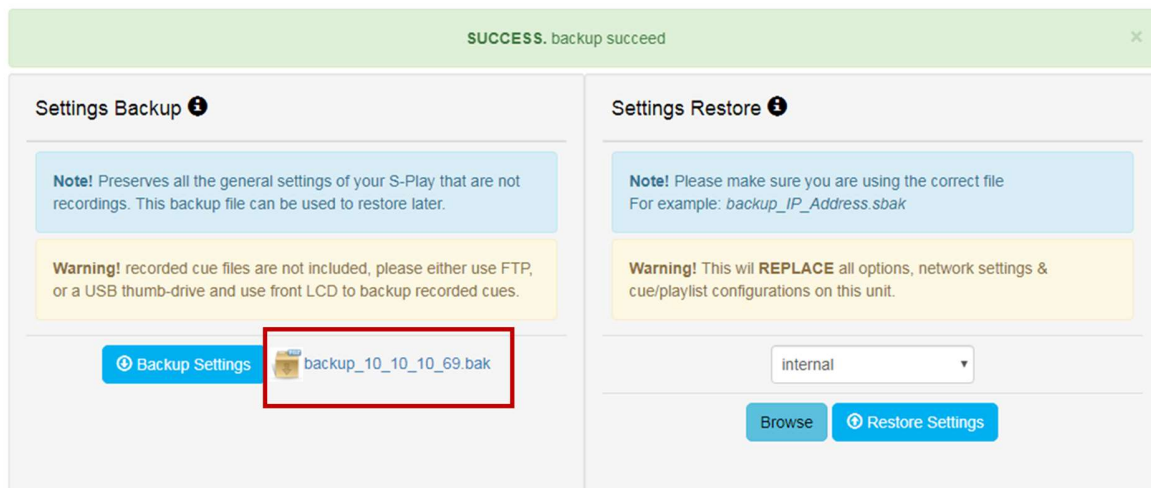
## Backup

S-Play produces a package that includes:

- ✓ Cues
- ✓ Playlist
- ✓ Schedules
- ✓ Settings

The backup can be done via LCD and web interface.

Go to Backup page, click “Backup”. The process produces a *.bak* package that can be downloaded and saved to any location in your computer.



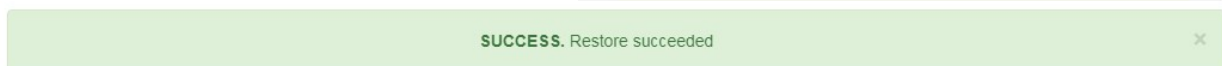
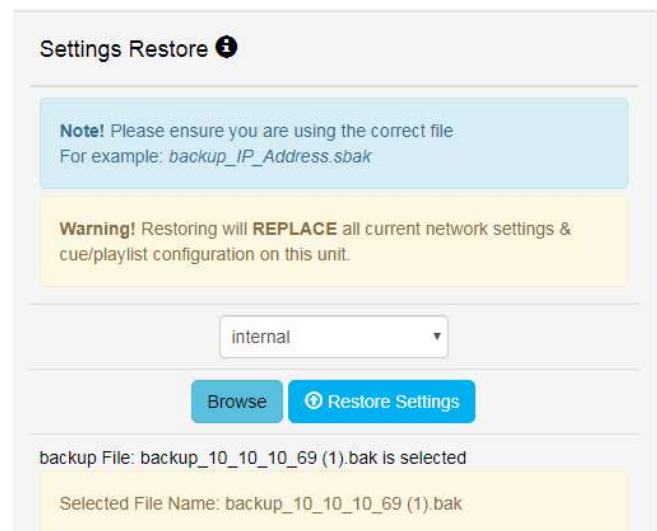
## Restore

Use the created *.bak* file to restore cues, playlists, schedules and output settings.

Go to the *Backup* menu in the web interface

- Select the desired memory location (internal or external)
- Click browse and look for the *.bak* file
- Insert and click on restore

Once the restore is complete, a confirmation message will appear on the top of the page.



## Storage

### Static Cue

Snapshots are comprised of a single DMX frame. The maximum file size of a frame of one universe with associated metadata is 518 bytes. To calculate the file size of a Static Cue.

To calculate the theoretical file size of a static cue, multiply 518bytes by the quantity of universes you intend to capture as part of the static cue. This calculation will give a file size in bytes.

$$((518 \text{ bytes}) * (\text{Quantity of Universes to be captured})) = \text{Static Cue Size (bytes)}$$

### Dynamic Cue

A dynamic cue can be thought of as a stream of Static Cues. To calculate the theoretical file size of a Dynamic Cue the size of a single 1 universe DMX frame (518 bytes) should be multiplied by the quantity of universes being captured, the quantity of frames being recorded per second and duration of recording (in seconds).

$$((518 \text{ bytes}) * (\text{Quantity of Universes}) * (\text{Frames per Second [produced by the DMX source]}) * (\text{Intended Recording Length [seconds]})) = \text{Dynamic Cue Size (bytes)}$$

### Triggers & Events

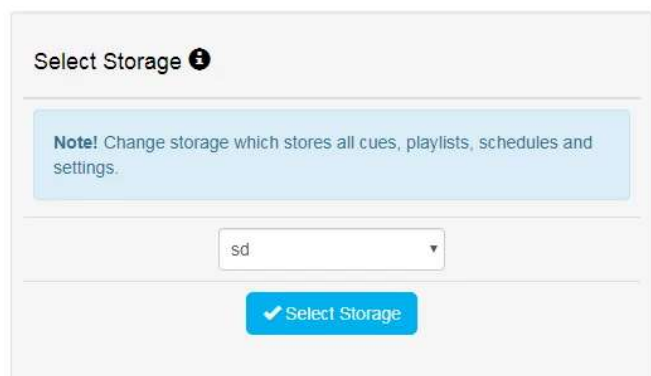
Triggers and Events each have a maximum file size of 1Kb (1000bytes). To calculate the theoretical storage size all Triggers and Events your configuration will occupy, multiply the total quantity of Triggers and Events you will use by 1Kb.

$$((1000 \text{ bytes}) * (\text{Quantity of Triggers and Events})) = \text{Total Trigger and Event Size}$$

## Select Storage

S-Play contains internal memory of 8GB+. However, if the storage is getting full, the user can switch memory to an external Class 10 SD Memory card designed for high load video recording is used. (i.e. Samsung Pro Endurance series).

S-Play can only operate from a single memory source so make sure to move all the files from the internal memory to the external SD card. To do so, please refer to the next section in the user manual "Export Playback Data"



**When a SD card is inserted into the S-Play it will be wiped and re-formatted to support the Linux EXT3 file format before shows are saved onto it. Ensure all files are removed from your SD card before inserting it into the S-Play.**

## Export Playback Data

The Export Playback Data function moves:

- Cues
- Playlists
- Schedules

from the internal memory to an external SD card inserted in the front slot of the unit or vice versa.

When moving files across make sure the desired storage is selected in “Select Storage” section on the web interface.

The files are copied from one location to another. Which means that they are not deleted from the original location.

The status of both memory devices can be tracked down in the “Status” page.

Export Playback Data ⓘ

**Note!** Export data from one storage to another replacing previous playback data on target storage.

From: sd ▼

To: internal ▼

✓ Export Storage

## Locking the S-Play and User Management

S-Play includes a locking system to prevent settings, playlists, cues and schedulers from being modified.

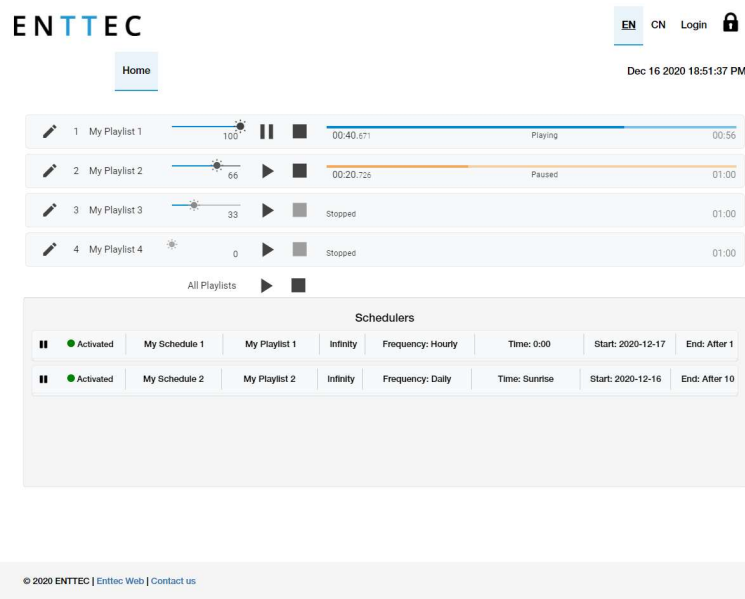
### How To Use The Lock Feature

Out of the box, S-Play is unlocked which means when connected to a network any computer within the network can change settings, create cues, create playlists, trigger playlists, etc.

If the lock on the top right corner of the screen is open, as shown below, the unit is unlocked and accessible within the network.



To lock the unit, simply click on the padlock in the top right-hand corner of the user interface and the unit will automatically disable all the tabs but home.



When the S-Play is locked, users can:

- Play and Stop any playlist
- Play and Stop all playlists
- Pause and Resume Schedules
- Navigate the LCD to preview cues, activate playlists and **display** settings

To enable full functionality the user account must be logged in.

When a user is logged in, the unit can remain locked for the rest of the users accessing from other locations/browsers. Within the network. However, the unit will ensure that only one browser is open at the same time when accessing "Home", "Cue Library" and/or "Playlist Page". This is to avoid having conflicting commands that can jeopardize any part of the recording process.

To unlock the S-Play, simply click on the padlock icon on the top right corner of the web interface.

## Default Login and Passwords

USERS	DEFAULT PASSWORD
User	123456



Before setting a password take a full backup of your show data and settings. If the password is forgotten or lost, contact the ENTTEC support team for assistance to use the **Admin** log-in functionality. A full factory reset of the device is the only method to return the password to default.

## Status

Network Information ⓘ

IP Address:	10.10.10.118
Subnet Mask:	255.255.255.0
Broadcast Address:	10.10.10.255
Serial No. / Mac Address:	00:50:C2:07:F0:73

Output Information ⓘ

	Universe 1	Universe 2	Universe 3	Universe 4	Universe 5	Universe 6	Universe 7	Universe 8	Universe 9	Universe 10	U
Protocol	ArtNet	ArtNet	ArtNet	ArtNet	ArtNet	ArtNet	ArtNet	ArtNet	ArtNet	ArtNet	A
Universe	0	1	2	3	4	5	6	7	8	9	1
IP Address	192.168.0.1	192.168.0.1	192.168.0.1	192.168.0.1	192.168.0.1	192.168.0.1	192.168.0.1	192.168.0.1	192.168.0.1	192.168.0.1	1

System Information ⓘ

System Status: ✔ STARTED STOP ENGINE REBOOT

Activity: No Playlist is Playing

CPU Status: Load: 16.8 % Temp: 34.9 °C

Disk Space:

5.38 % used

SD (Internal) 7.39 GB free out of 7.61 GB

5.35 % used

sd mounted on Wed 23 Oct 12:25:18 AEDT 2019 13.76 GB free out of 14.53 GB

System Name:  S-PLAY

System Uptime: 1 day, 16 minutes

Hardware ID: 165166cb0a818b9b

Software Information ⓘ

Software version: 19092018-92 (updated: 19/09/2018)

DMX driver version: version: 1.41

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The Status page displays the following information:

### Network Information

- IP Address
- Subnet Mask
- Broadcast Address
- MAC Address
- Engine Address

### Output Information

- Protocol
- Universe
- Output IP Address, *(if applicable)*

### System Information

- Status
- Activity
- CPU Status
- Disk Space (internal and external)
- System Uptime
- Hardware ID

### Software Information

- Software Information
- DMX Driver Version

## Specifications

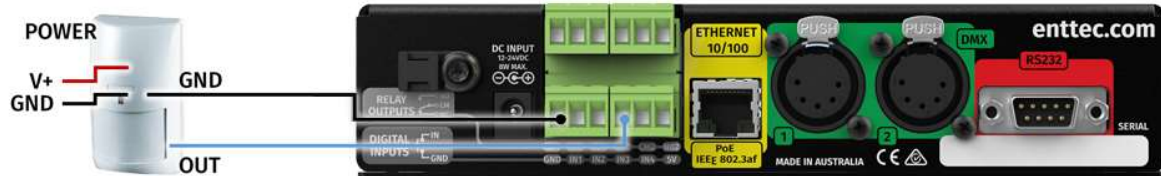
Item	Value
<b>Input Voltage</b>	12 V DC to 24 V DC
<b>PoE</b>	IEEE 802.3af
<b>Max. Power Draw</b>	8w
<b>Universes</b>	32U total: -2 Physical DMX Ports -Up to 32 ArtNet/sACN Universes
<b>Internal Storage Capacity</b>	8GB or higher
<b>Output Protocol</b>	Art-Net/sACN / 2* Physical DMX
<b>Connectors</b>	1X DC Jack (Power) 2X Female XLR5 (DMX512) 1X RJ45 (Ethernet) 1X Male DB9 (RS232) 1X USB Type-A (Host) 4X Dry Inputs 2X Relay Outputs (max 50vDC / 60W) 1X Micro SD
<b>IP Rating</b>	IP 20
<b>Operating Temperature</b>	-10° to 50° C
<b>Relative Humidity</b>	0 – 95% (Non-Condensing)
<b>Cooling Method</b>	Convection
<b>Shipped Weight</b>	1.25 Kg / 2.76 lb
<b>Packaging Dimensions</b>	390 X 208 X 102 mm

*Due to continuous improvements and innovation of all ENTTEC products, specifications and features are subject to change without notice.*



## Using Motion Sensors with the S-Play Diagram

### CONNECTION



Show 20 Controls

ID	Name	Protocol
1	Trigger 000	RS232
2	Trigger 001	OSC
3	Trigger 002	DMX
4	Trigger 003	Art-Net
5	Trigger 004	sACN
6	Trigger 005	Digital Input
7	Trigger 006	N/A
8	Trigger 007	N/A
9	Trigger 008	N/A
10	Trigger 009	N/A

### Control Options

Control Name:

Output Type:

Ports:

**Control Options**

Control Name: Trigger 005

Output Type: Digital Input

Idle position for digital input is high

Triggers can be executed when the digital input position is low

Ports: 3

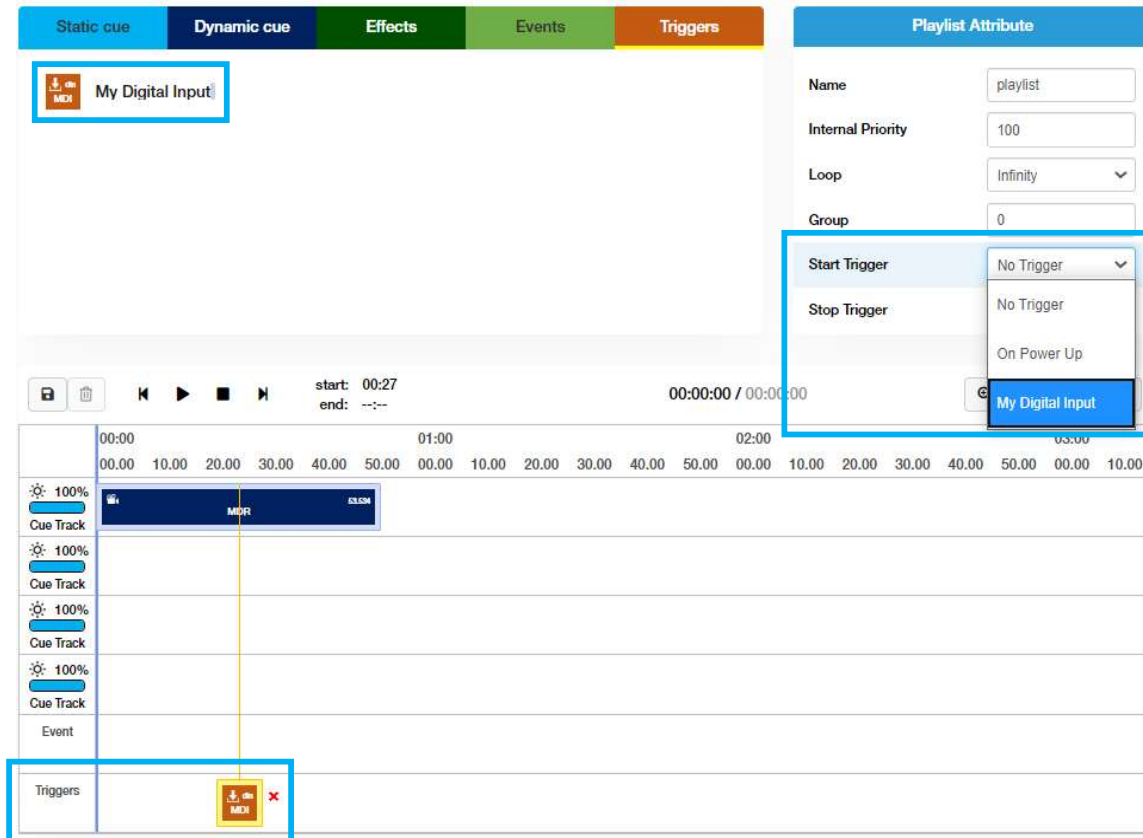
Save Trigger Reset Trigger

BOTTOM ROW DIGITAL INPUTS

### Steps

1. Connect out dry input from sensor to Port3 (or any other port on the bottom connector) in the GPIO trigger connector in S-Play.
2. Connect ground from sensor to GND connector in the GPIO trigger connector in S-Play.
3. Go to web interface:
  - Go to “Triggers”
  - Click on an empty entry
  - Change name on control name
  - Select Digital Input from “Type”
  - Change to Port 3 in “Ports” (or to the corresponding port the OUT cable was connected to)
  - Click on save control

4. Trigger is saved in the unit and it is ready to be used in a Playlist or as a trigger to start a playlist



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