

S-PLAY Series– Touch OSC Mk1 Guide

Revolutionary Smart Player for hassle-free, professional light shows and automated projects.



Introduction

In this guide, we’re going to learn how to use the 3rd party app TouchOSC Mk1, to create a simple, elegant control surface for our S-PLAY-controlled lighting system. The goal is to create a user-facing control panel on a device such as a tablet or smartphone, that we can then pass to a non-technical, end user so they can control their lighting system without needing to have a working knowledge of the S-PLAY’s GUI or DMX/Pixel lighting in general.

For the purposes of this guide, we’re going to assume that you have already programmed your S-PLAY with the desired cues and playlists. If you require any assistance getting this part done, feel free to check out our other guides.

We’re going to be generating a panel like this:



1 - Example TouchOSC Mk1 control panel for S-PLAY

This control panel example features 6 playlists, start and stop buttons, and intensity faders for each playlist – letting the end user start, stop and adjust each playlist individually. There is also a master ‘stop all’ button on the top left, and a master intensity fader in red on the left.

This is just one example but using the methods in this guide you can make your own control layout as straightforward or as complex as you desire.

Getting started

Things you will need:

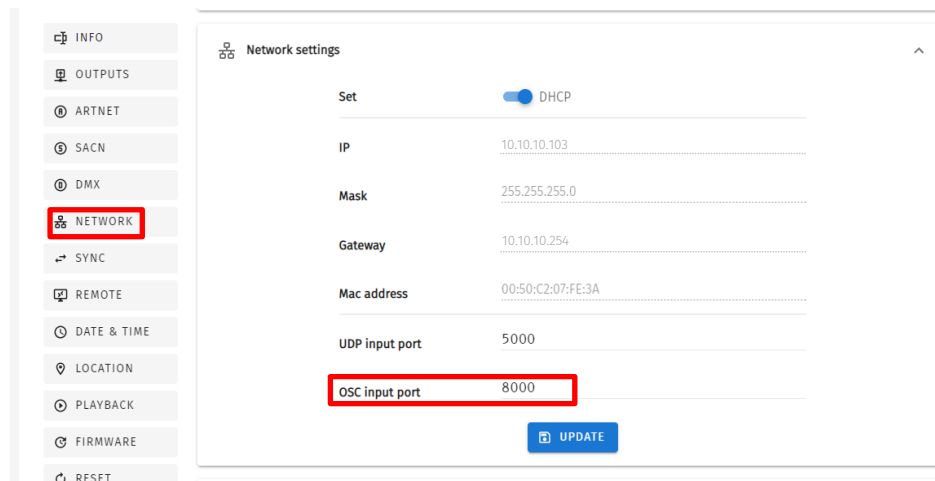
Before you begin, we will need to have the following:

1. Access to your S-PLAY's web page user interface.
2. Wi-Fi network connecting your device (the tablet or smartphone that you intend to set up with the TouchOSC Mk1 interface) and your S-PLAY.
3. A computer with TouchOSC Mk1 editor.
4. The S-PLAY's OSC API.

Getting OSC & playlist information from S-PLAY

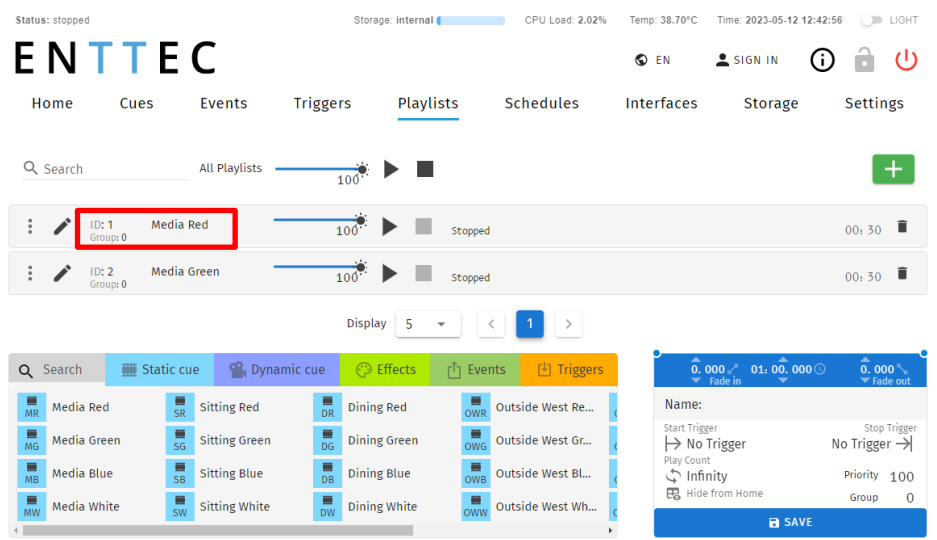
We need to get some key info from the S-PLAY including the OSC Port that the S-PLAY is expecting to receive data on. Port in this context is not referring to the physical ports on the device like the DMX port, it is referring to the ethernet data port through which OSC is being communicated.

We can do this in the S-PLAY by navigating to the "Settings" tab and click "Network" at the left menu, and from here we will see the default OSC input port is 8000.



2-1 - S-PLAY – OSC Input Port

When navigating to the S-PLAY Playlist Tab, you will find Playlist ID which gives us the info we need to be able to create our buttons and triggers properly in TouchOSC Mk1.

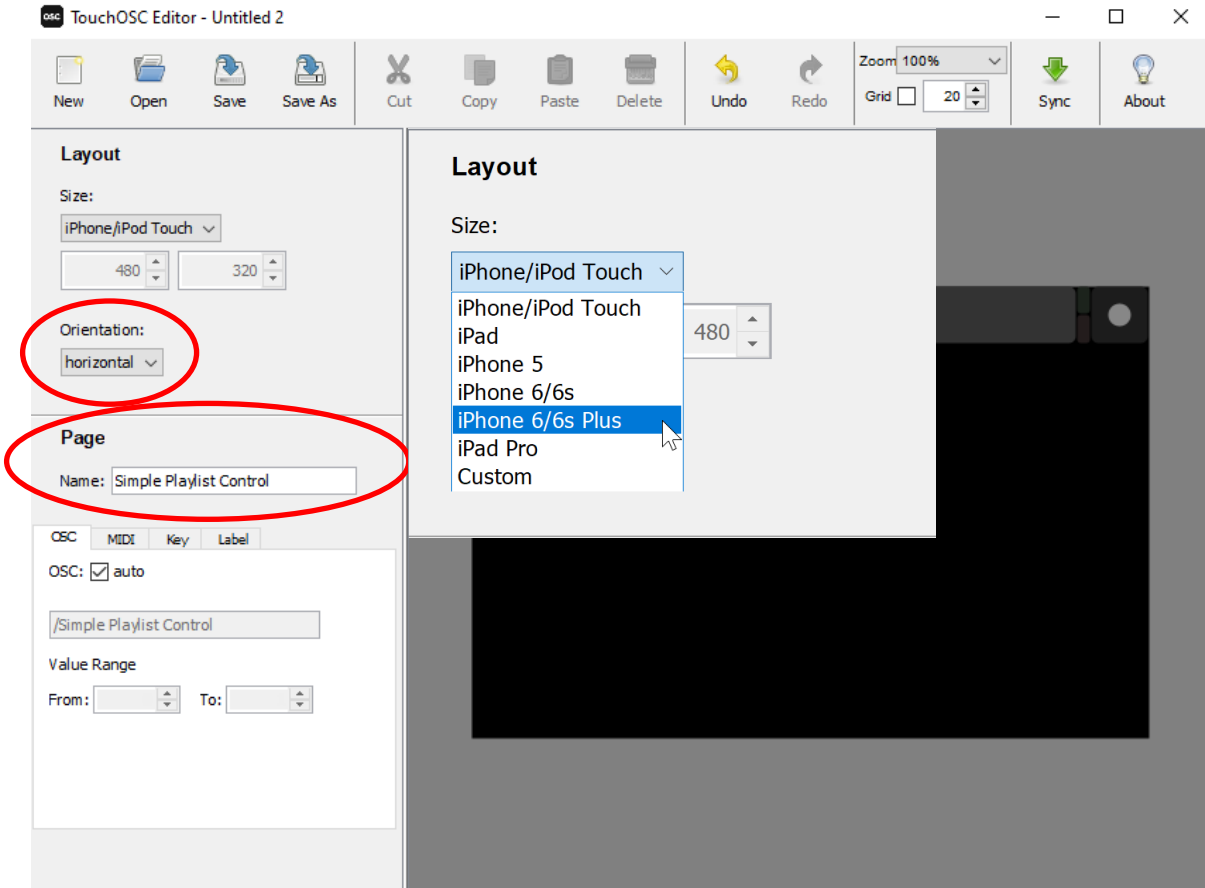


2-2 - S-PLAY – Playlist ID

Creating the TouchOSC Mk1 layout

Establishing the workspace

Firstly, we're going to want to open TouchOSC Mk1 editor on our computer. Once the software is opened, we will see a blank, black box that represents the screen of your device (tablet/smartphone). We need to name this page – we're just calling it "Simple Playlist control" then rotate it by changing the orientation to horizontal.

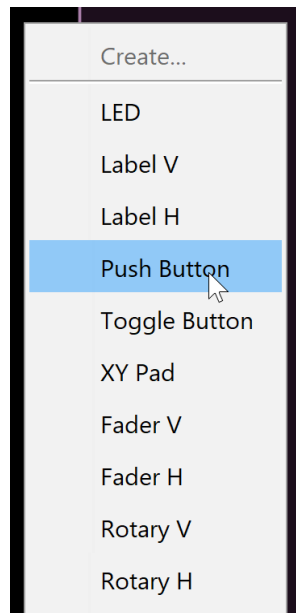


3 - TouchOSC Mk1 Editor

TouchOSC Mk1 editor has a few pre-set apple device screen sizes to choose from. For many phones, the iPhone 6 plus resolution is close enough, but if you really want it to fill your screen perfect you can enter your own values by choosing a custom layout size.

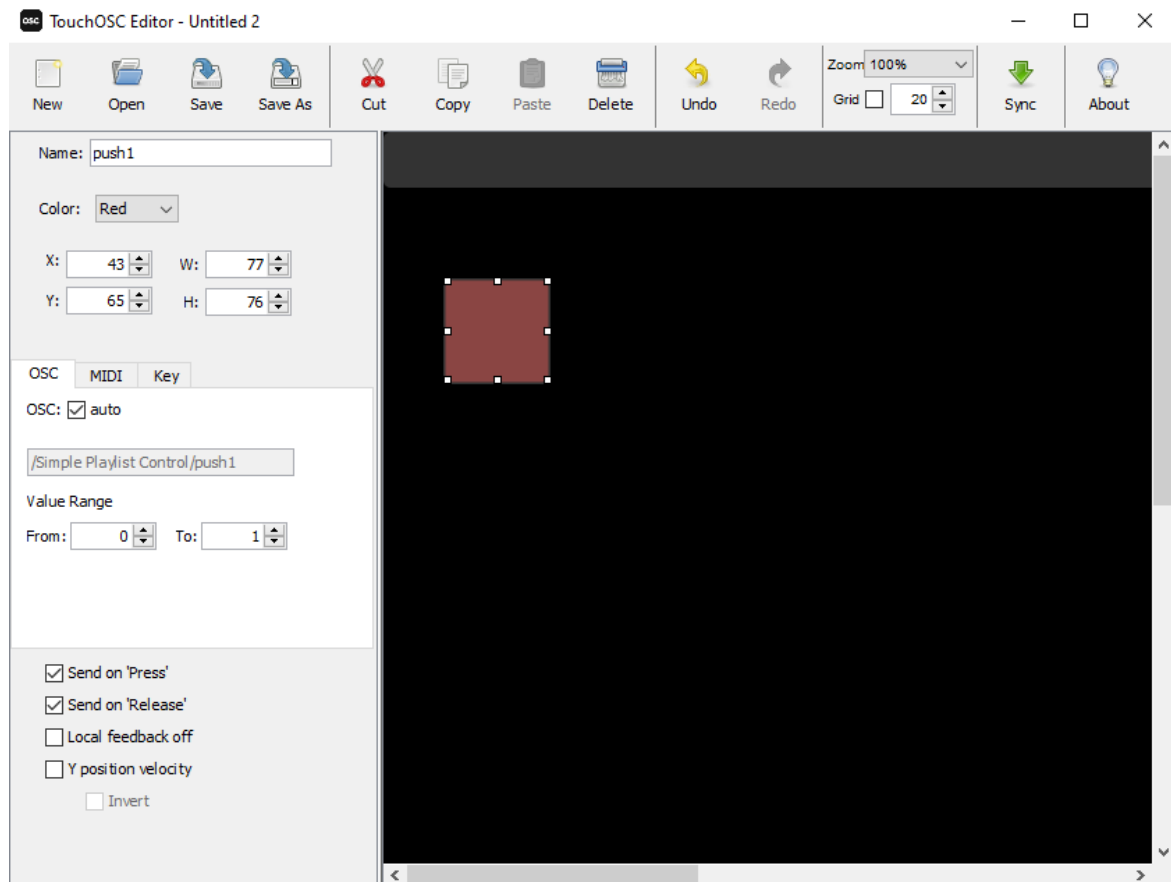
Add a “Stop All” button

Now that our workspace is set, we can start adding things to our layout – starting with a simple, *stop all* button. To do this we can right-click anywhere on the black workspace to open the element selection menu. We’ll need to select a “Push Button” type element.



4 - Add Element

Using the nodes in the corners and edges we can re-size the button as we like, and then drag it into place. We’ll put ours in the top left.



5 - Format Button

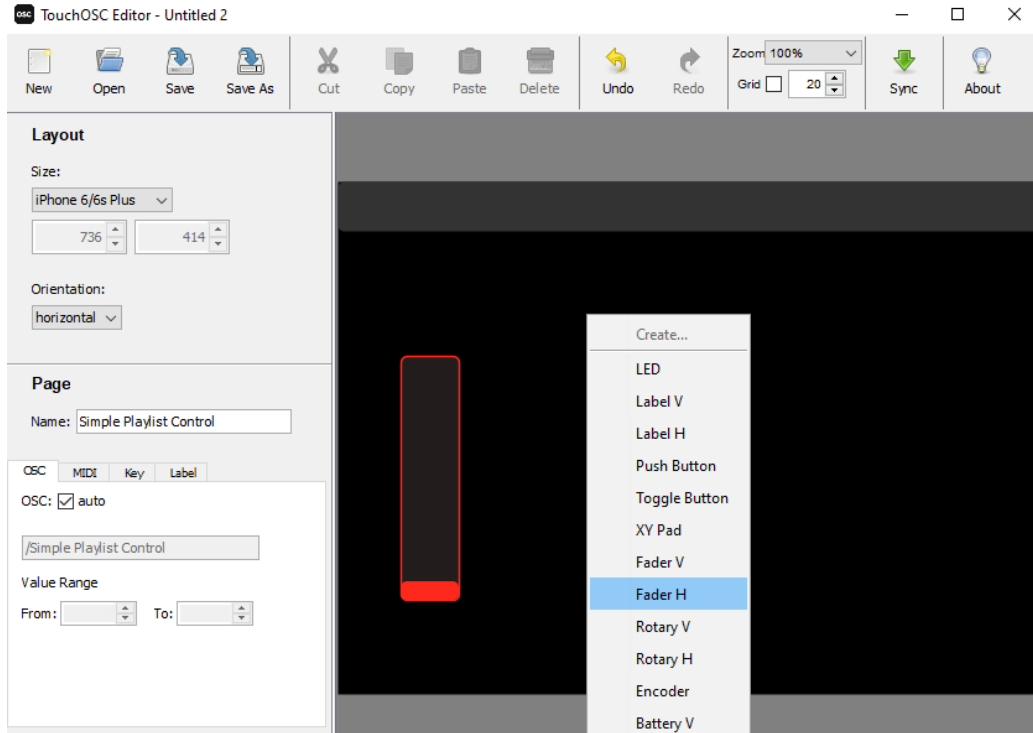
Once positioned, we can then set the name, colour and function of the button. Click on the button and its settings will appear on the panel to the left.

Things like the name and colour are open for you to fill however you choose, however the OSC string needs to match the string that the S-PLAY is expecting to see to fulfil the function you are after. If in doubt, you can always check out the OSC API document the ENTTEC website.

6 - Button Settings

Add a “Master Intensity” fader

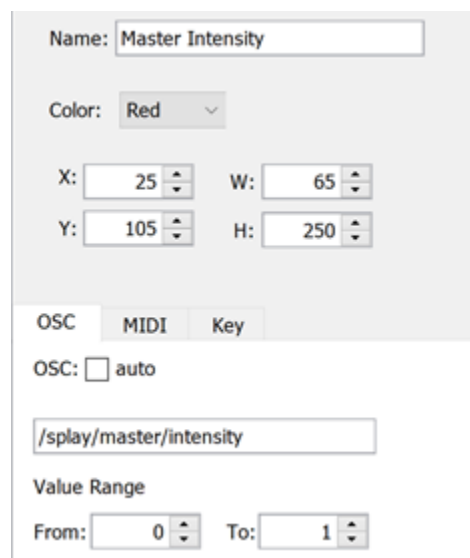
Now that we have our “Stop All” button, let’s add a Master Intensity fader. This will give us control over the intensity of any show being output – acting as our global master intensity for the whole device. The process is very similar to what we just did for the button except instead of creating a push button we’ll want a vertical fader (use Fader H, because we just rotated the screen, so our verticals are now horizontal and vice versa).



7 - Add Fader

We’ll also be using a different OSC string of course! Again, we can just copy this from the S-PLAY OSC API.

Place the fader as desired, and then go into the settings and enter the command string, this will be `/splay/master/intensity` however it is important that you also set the value range to be from 0 to 1 as this is the range that will be used to interpret the intensity value.



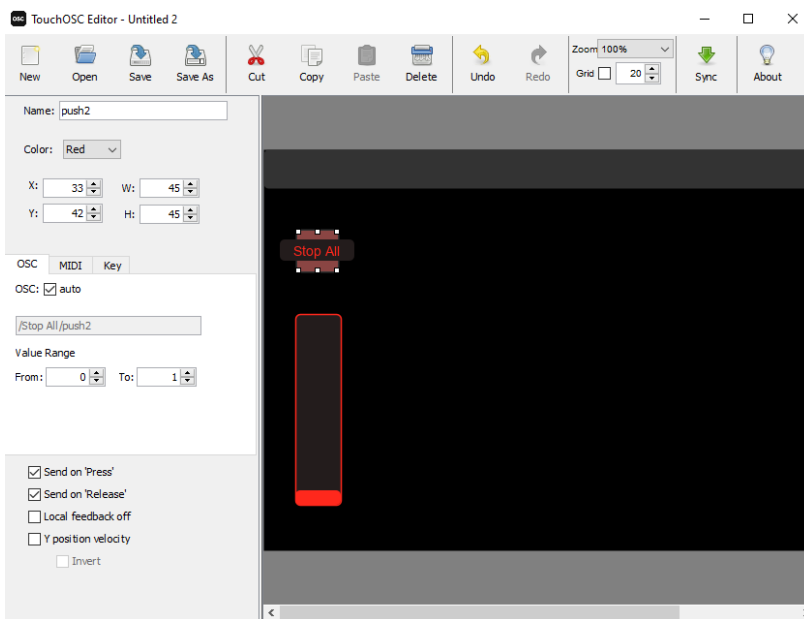
8 - Fader Settings

Adding Labels

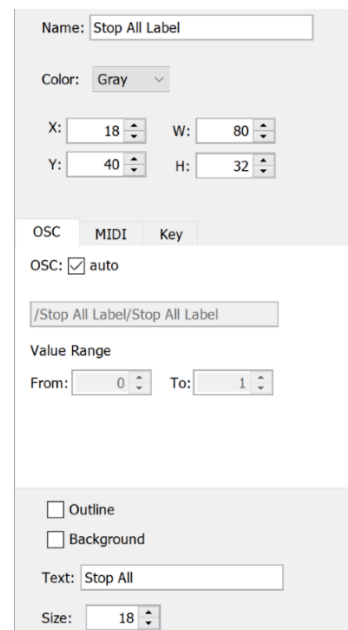
It's a good idea to label all the buttons you enter so both you, and more importantly your client/end-user/colleague who didn't program the system knows what each one does. This way they won't be calling you every day asking what the red button in the corner does!

Labels cannot be interacted with once the layout is imported into the app, so you can place the Label directly over the button and you will still be able to click/slide/rotate it on the app. Try to make the label box smaller than the button/fader though, because you'll want to be able to click on the button to access its settings just in case you need to edit it later!

In the setting on the left you will find options to disable the background so that the label is just text on the button, change the font size and change the text. As well as standard things such as colour and size position. The label does not need and OSC string so you can leave it set to auto.



9 - Add Labels



10 - Label Details

Adding individual playlist controls

Now that the masters have been configured, we can move to making the control for individual playlists. This is the same process except with slightly different command strings and the addition of a Play button. First, we will create the stop button the same way we did for the master except this time we will need to enter `/splay/playlist/stop/1` where 1 is the ID of the playlist we want to control.

Name:

Color: Red ▾

X: W:

Y: H:

OSC **MIDI** Key

OSC: auto

Value Range

From: To:

11 - Stop Button Settings

Once The stop button is made you can copy and paste it to create a second button that is the same. Then position it below, change the button to green, and change the command to say 'play' instead of 'stop' e.g., `/splay/playlist/play/1`

Name:

Color: Green ▾

X: W:

Y: H:

OSC **MIDI** Key

OSC: auto

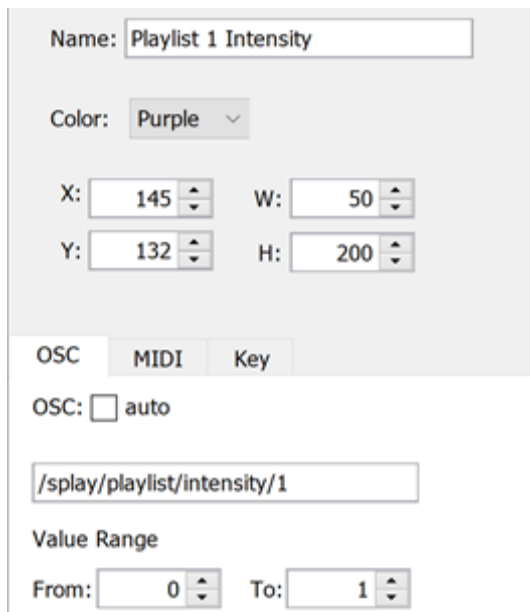
Value Range

From: To:

12 - Start Button Settings

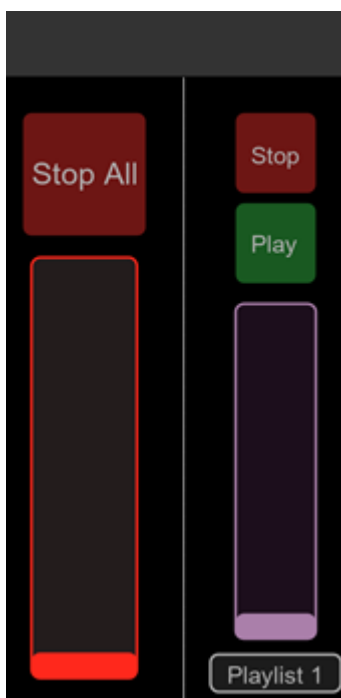
Now you have a go and a stop button for your playlist.

Again, as we did with the masters, we will add a fader to give us intensity control of the playlist. The command for this is `/splay/playlist/intensity/1` again, "1" is the ID of the playlist, so this becomes the fader for the first playlist.



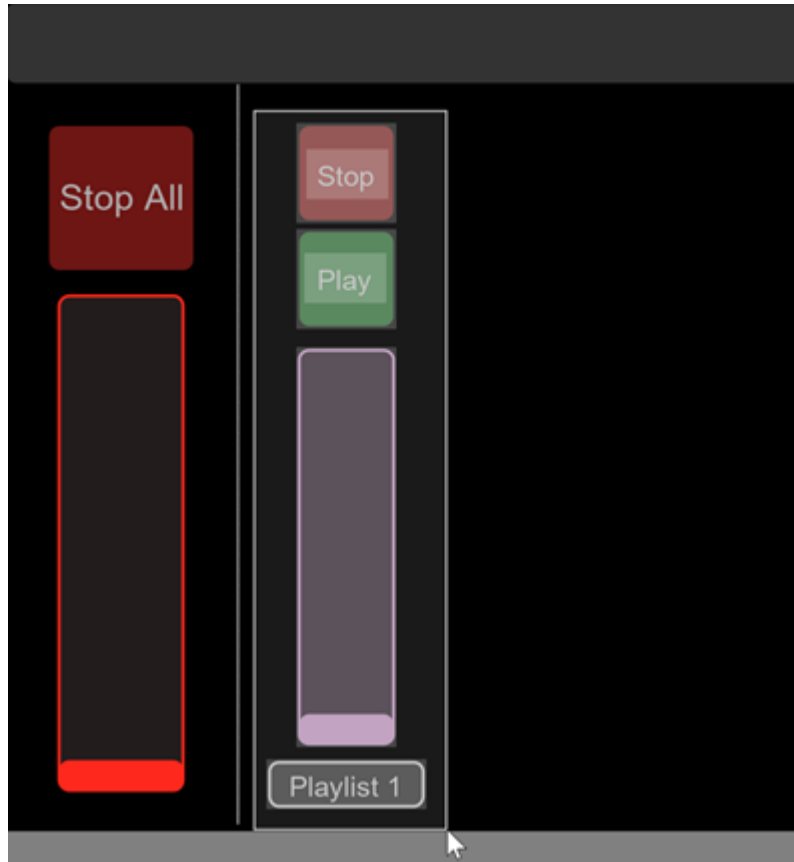
13 - Intensity Fader Settings

Once all the controls are made for playlist one, we can add button labels, and a label at the bottom to specify which playlist is being controlled. We've just called this one "Playlist 1", but it would be more helpful for your end-user to write a label which describes the show, like "White/Line Effect/Scroll" etc.

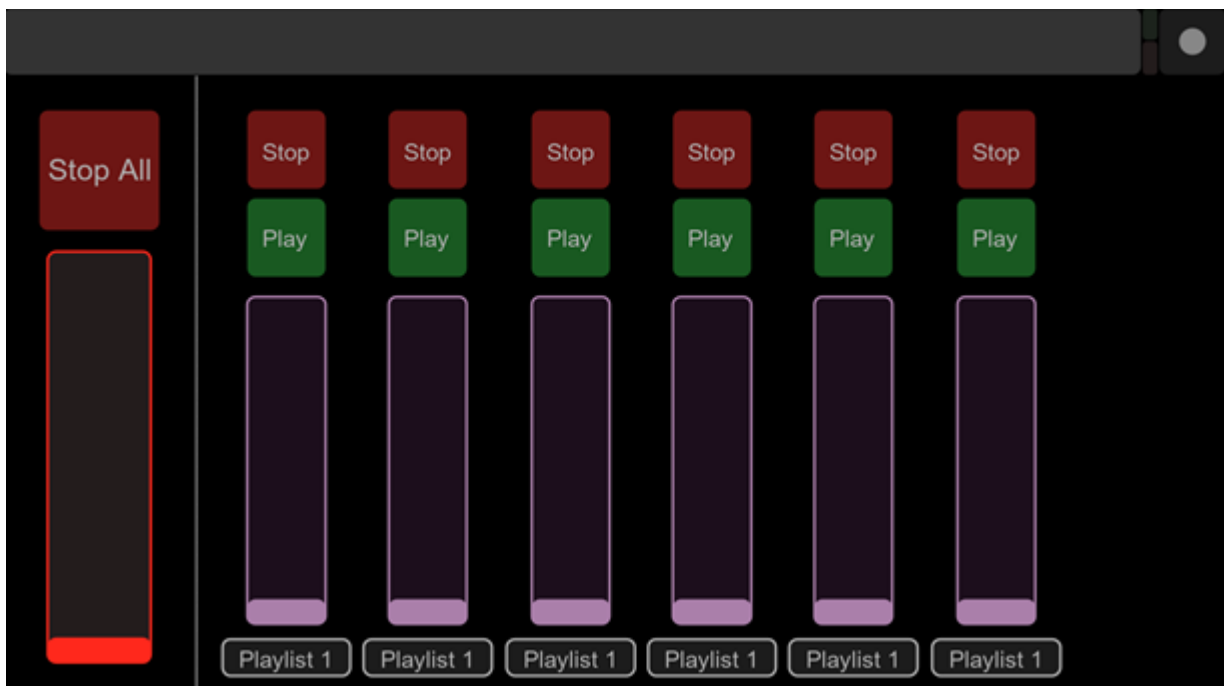


14 - Layout progress

Now we just need to repeat this for all the other playlists we have programmed into the S-PLAY. As a shortcut, we can just highlight the playlist 1 controls and copy/paste to duplicate it. This will duplicate the selected elements, and paste them over the top, so just drag them over to the side so they're not overlapping the Playlist 1 controls.

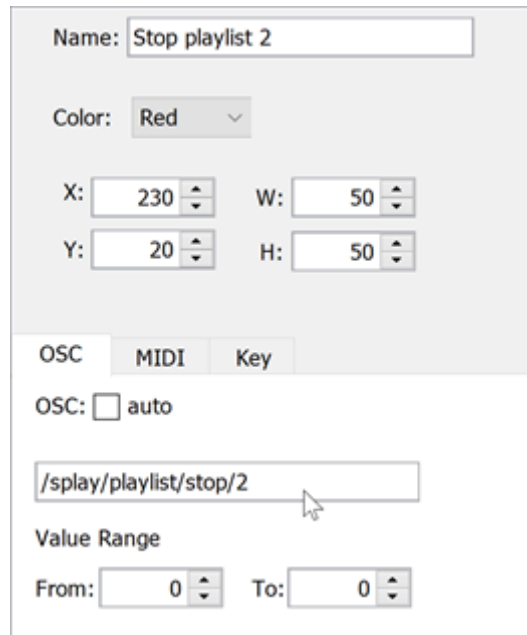


15 - Copy Layout Section



16 - Duplicated Layout Sections

These are all exact duplicates of the Playlist 1 controls though, so we do need to go through each set and update them, so each set references the playlist it's meant to control e.g. `/splay/playlist/stop/2` for the Playlist 2 Stop button or `/splay/playlist/intensity/5` for the Playlist 5



17 - Modify Stop Button Settings

Depending on the spacing of your strips you may have some extra space at the end. There are a couple of things that can be done from here, you could respace and resize your strips to fill the space, or you can add some extra buttons onto the side for OSC triggers and other random things, or maybe just because they look nice filling the page. You could also go back to your S-PLAY and program another playlist or two for more visual options.



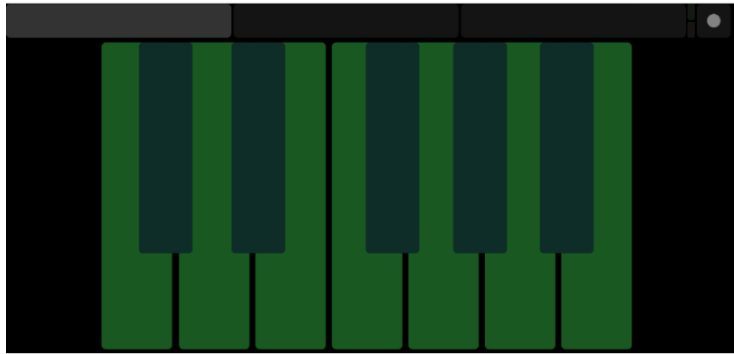
18 - Layout Preview

So there we have it, our finished layout in TouchOSC Mk1 Editor. Next, we'll have to get this onto our device.

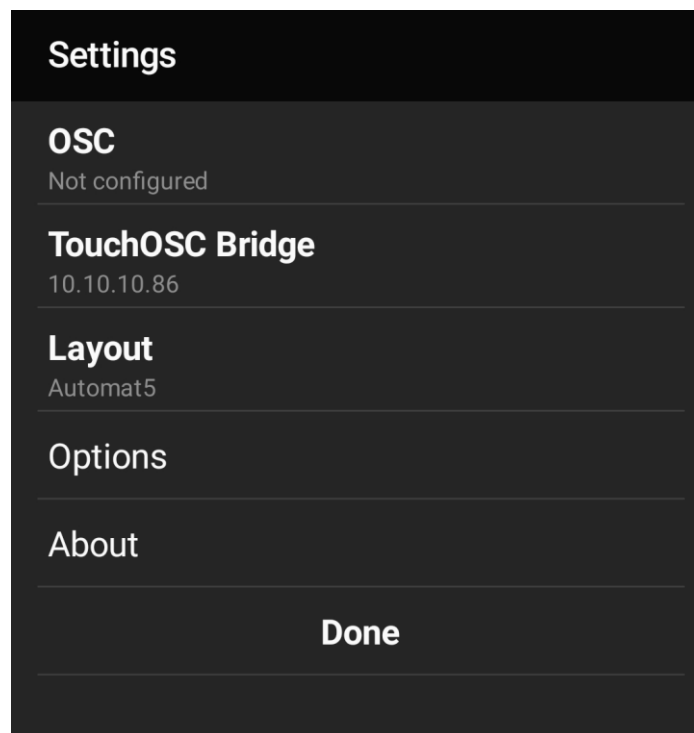
Loading your Layout to the TouchOSC Mk1 App

Starting up

When you open the TouchOSC Mk1 app, it will show one of the default layouts. To get to the settings, simply press the circle in the top right of the screen.



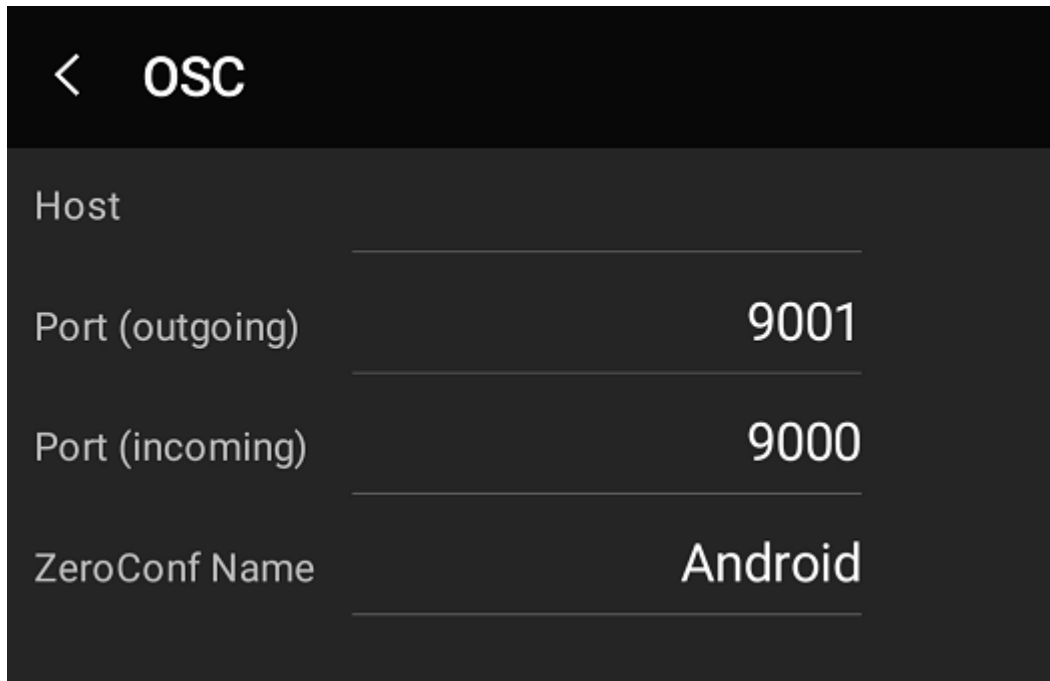
19 - TouchOSC Mk1 Default screen



20 - TouchOSC Mk1 Settings

Entering Details

First go to the OSC tab. Here we will need to enter the appropriate details into each field. If you have used TouchOSC Mk1 before on other projects you might be expecting some of this information to autofill, but this tends to work best when connecting to computers, so for the S-PLAY, we'll have to enter some details manually.



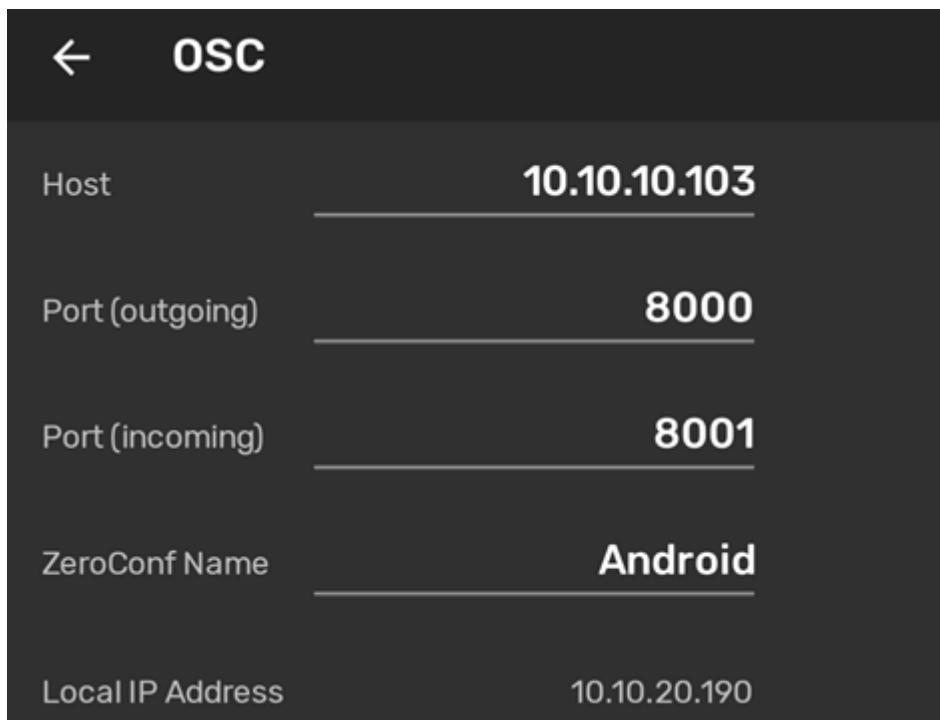
21 - Default OSC settings in TouchOSC Mk1

The 'Host' is the S-PLAY so here we'll need to enter the IP address of our S-PLAY. This can be obtained by using NMU to scan the local network, or just by checking the IP address of the S-PLAY displayed on the front LCD.



22 - ENTTEC NMU Scan

The incoming port is not important for controlling the S-PLAY, but we do need to set the outgoing port, and that needs to match the OSC input port in the S-PLAY settings page.



23 - TouchOSC Mk1 - OSC settings for S-PLAY

 Network settings

Set	<input checked="" type="checkbox"/> DHCP
IP	10.10.10.103
Mask	255.255.255.0
Gateway	10.10.10.254
Mac address	00:50:C2:07:FE:3A
UDP input port	5000
OSC input port	8000

 UPDATE

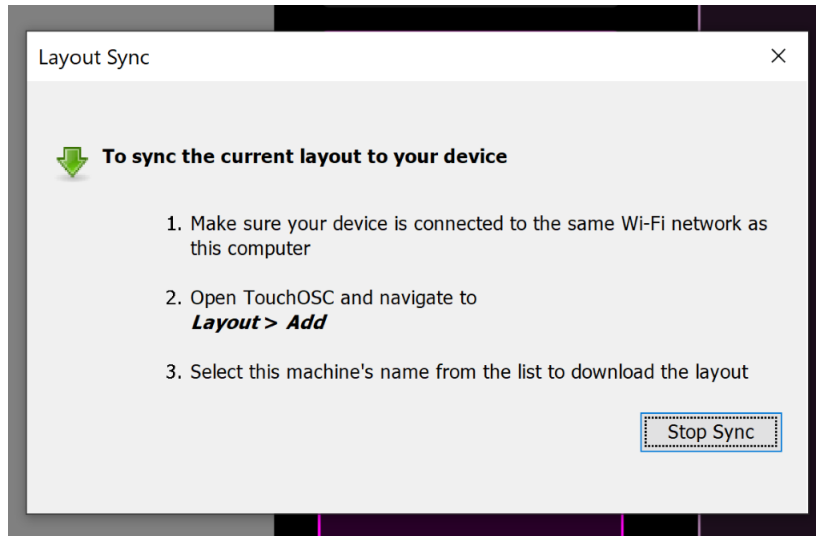
24 - S-PLAY - TouchOSC Mk1 settings

As you can see, the outgoing port from TouchOSC Mk1 (8000) matches the input port in the S-PLAY.

When we go back to TouchOSC Mk1 settings, we will also see a field for TouchOSC Mk1 Bridge. This is a tool that runs on your computer and facilitates MIDI so can be disregarded for S-PLAY

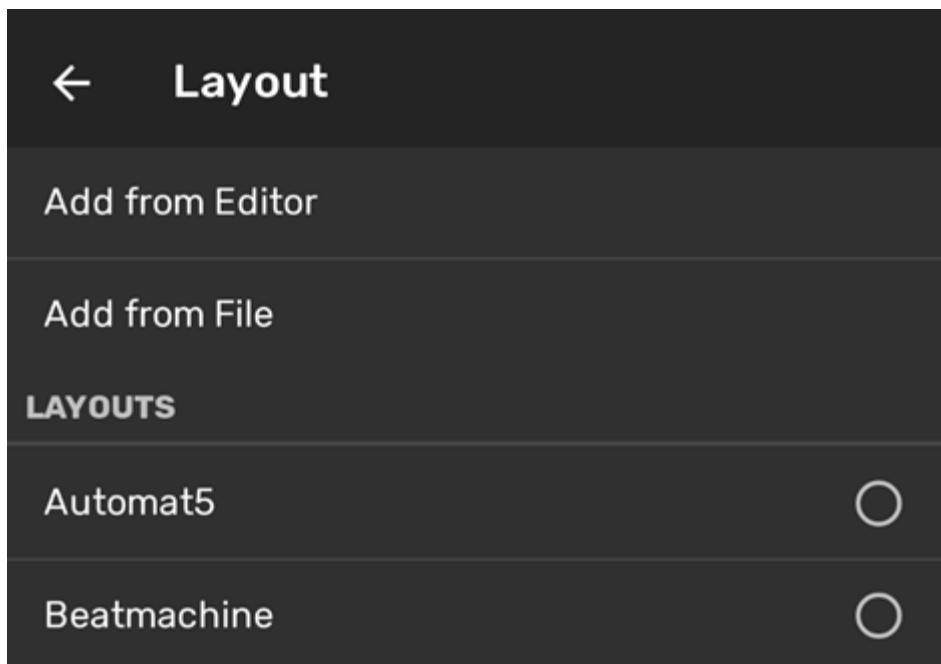
Loading the Layout

Now we have entered our settings in TouchOSC Mk1, we can hop back to our computer and TouchOSC Mk1 Editor. Simply click the sync button and wait for the popup to appear.

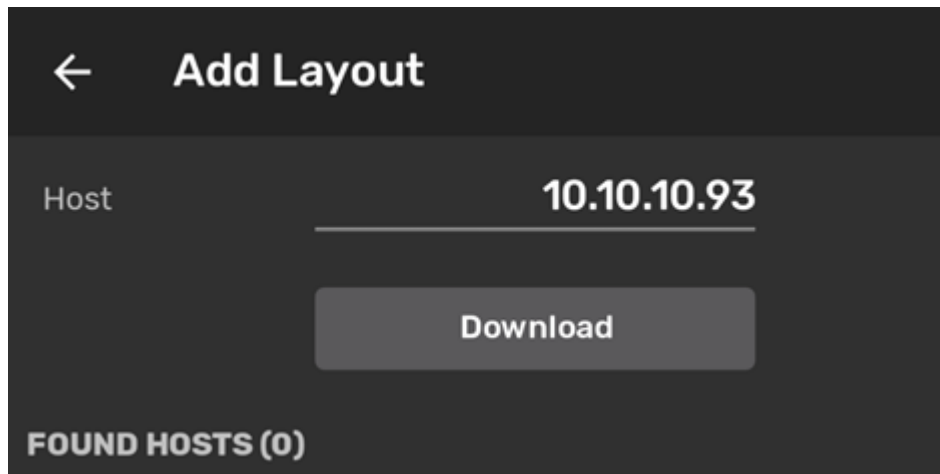


25 - TouchOSC Mk1 Editor - sync

Now that TouchOSC Mk1 Editor is ready to sync, switch back to the device running the TouchOSC Mk1 app, enter the layout selection menu, and select "Add from Editor". Enter the IP address of the computer you are running TouchOSC Mk1 Editor on, and press download. You can then scroll down the list to find the layout you just imported and select it.



26 - TouchOSC Mk1 Layout selection



27 - Host IP address to download layout

Head back out of the settings using the back arrow and pressing “Done”. You should now be able to see and use your layout. You can freely move the fader, press the buttons, and S-PLAY will receive those commands and respond accordingly.

Conclusion

That brings us to the end of this guide. By following these steps, you can create a control panel on your smart phone or tablet to intuitively control the S-PLAY, call shows, and adjust brightness's. This guide gives you a run down on a basic workflow and control panel, but this is just the beginning. With a bit of time and ingenuity, you can create even more sophisticated control panels.

Ordering Information

For further support and to browse ENTTEC's range of products visit the [ENTTEC website](https://www.enttec.com).

Item	Part No.
S-PLAY	70092

enttec.com

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