

# HTML - DIGITAL OUTDOOR



DEVELOPMENT  
GUIDELINE

AFA Decaux

**Developing HTML banners for the AFA Decaux display is a bit different from standard banner development. You should in particular take note of the display rotation and delayed display sections below to ensure that your banners will be rendered correctly.**

**In the end of this document you will find a simple package that exemplifies the technical specifications put forward in this document.**

#### DISPLAY SIZE

You should design your banners for 1080x1920 px. The display uses a 1 pixel ratio, so there is no need to oversize your graphics for better display quality.

#### DISPLAY DURATION

Your banner will be shown on the display for a duration of 10 seconds as default. However this is flexible.

#### BROWSER / RENDERING ENGINE

The display system is based on a QtWebEngine 5.15.11, running on a Linux box – this is equivalent to a Chrome 87.

Using Canvas and WebGL is supported, but you should expect no more than 25 fps.

You can use your favorite JS library, as long as you keep it to features supported by Chrome 87 – and all library files must be included using relative paths in your delivery.

See this link for full feature support overview:  
<https://caniuse.com/?compare=chrome+87&compareCats=all>

#### ASSETS AND FILE-EXTENSIONS

All assets and ressources (images, videos, json, scripts, etc) that are being included in the creative must be stated with full name and extension. While most web servers are able to automatically find the correct extension, unfortunately the display system does not have that feature.

#### DISPLAY ROTATION – IMPORTANT

The portrait format display is implemented with a 90 degrees counter clockwise rotated browser, which means your banner delivery must compensate for this rotation to be displayed correctly.

This can be done by applying appropriate counter rotation to your banner when preparing the banner for shipment to the Sales support team.

An example of the needed counter rotation can be found in the boilerplates example below.

#### DELAYED DISPLAY – IMPORTANT

The media system that displays your banner will queue the banner before actually showing it on the screen. When your banner is finally displayed the system will dispatch a `jcdms _playbackStart` event on the window object. That means that your JavaScript will be invoked well ahead of the actual displaying of your banner – and you cannot rely on load or DOMContentLoaded events to decide when to start your animations.

Therefore your banner must be built with a two step mechanism in place.

Step 1: Preload all your assets and render only the first frame of the banner. In case you are using embedded video, make sure the video is paused on the first frame.

Step 2: When the `jcdms _playbackStart` is received, then you can start the animations and/or video playback.

If you fail to wait for the `jcdms _playbackStart` event to be dispatched, your banner may already be finished when actually shown on the display.



## PLAYBACK START EVENT

When the banner is shown on the display a `jcdms_playbackStart` is dispatched to the window object and only then should your animations start.

You can catch the `jcdms_playbackStart` event like this:

```
window.addEventListener("jcdms_
  playbackStart", function() {
    // Banner start - add your own code
  });
```

A working example is included in the boilerplate / examples below.

## PACKING AND SHIPPING YOUR BANNER

Pack the banner in a zipped folder and ship it to the Sales support team.

The folder can contain subfolders for organizing your assets, but be sure that everything is linked together using paths relative to your HTML file.

The AFA Decaux display works as an isolated system and you cannot include external resources in your banners. All JavaScript, CSS, images, videos and other assets must be included in the zip-file.

## EXTERNAL RESOURCES

Since the AFA Decaux display works as an isolated system, you cannot include external resources in your banner.

If your banner requires a real time feed from an external source, such as a .json file with live data, then contact the AFA Decaux team to arrange for a whitelisting of the external resource.

It is recommended that you implement a fallback visual in case the external resource is not available due to unexpected downtime.

## BOILERPLATE / EXAMPLES

We have developed two boilerplates to ease your development process and deal with the special requirements of the AFA Decaux Display.

Depending on your preference you can build your banner as a single `index.html`, with directly applied counter rotation, or use an `iframe` to handle the rotation.

These zip-files also illustrate a correctly packed delivery ready for shipment.

## RESTRICTIONS (ONLY FOR RAIL/DSB)

Layout must not contain traffical signs or pictograms which can be confused with traffic marks. No sudden motions, flashes, or layout which represents danger.

Should DSB decide that the above requirements are not met, a new version of the material will be required before further proposal can be delivered. AFA Decaux nor DSB can not be held responsible for additional costs.

## DELIVERY

The files are to be sent to [digital@afadecaux.dk](mailto:digital@afadecaux.dk)