# HOW TO USE THE BUILT-IN FUSION FUNCTION IN SUPPORTED DREAMOC MODELS

Please note that by using any of the Dreamoc Fusion releases, you automatically agree to the Terms and Conditions described in the "TERMS.pdf" document included in those releases.

## **STEP 1: UPGRADE THE FIRMWARE**

To enable fusion on a supported Dreamoc model, you must first upgrade the firmware on each display. This is done via the SD card. IMPORTANT: Do not turn off the Dreamoc while it is upgrading firmware!

- 1. Prepare an SD card by formatting it to FAT32.
- 2. Copy the file "upgrade\_loader.pkg" included in these resources to the root of the SD card. It is a good idea to also copy a movie to the same card, as you can then easily see/hear when the upgrade is complete = the movie starts playing.
- 3. Make sure power is turned off on the Dreamoc.
- 4. Insert the SD card and turn on power.
- 5. Wait for the Dreamoc to upgrade. This will take a couple of minutes. The upgrade is complete when the movie starts playing. If there is no movie on the card, an error icon will appear instead, indicating that there is no movie on SD card and no signal on HDMI input.
- 6. Repeat steps 4-6 on all Dreamoc displays in your Fusion setup, using the same SD card.
- 7. When you have upgraded all displays, delete the 'upgrade\_loader.pkg' file from the SD card again.

#### WHY IS THIS NEEDED?

The first time you want to use a supported Dreamoc unit for Fusion, you need to add/unlock this specific technical feature and it's settings on the display. This is done with a firmware upgrade. If, at a later time, you wish to use the Dreamoc display as a stand alone unit, there is no need to roll back the firmware. It still has all its standard features, and will function as a normal Dreamoc display, as soon as Fusion mode is set to 'off'.

## **STEP 2: CONNECT THE DISPLAYS**

Connect your Dreamoc displays via a switch box or router with standard ethernet cables. For Fusion setups with only two Dreamoc displays, you can simply connect them directly with an ethernet cable, and omit the switch box/router.

#### WHY IS THIS NEEDED?

In order for the displays to establish and maintain a frame-accurate sync, they will need to communicate continuesly. They do so through the ethernet ports, and by connecting every display with a cable to a switch, they can freely communicate between eachother. Standard network products can be used. If you use a router, make sure DHCP is enabled, and that no special limitations have been configured on the unit.

## **STEP 3: CREATE CONFIG FILES**

- 1. Navigate to the Fusion configurator here, or go the supportpage for Fusion on our website, and answer a couple of simple questions about your specific Fusion setup. Based on your answers the configurator will create config files for your Dreamoc displays and save these on your computer.
- 2. Inside the zip file saved by the configurator, you will find a 'Master' folder and a 'Slave' folder. In a Fusion setup, you need one display acting as 'master', that tells the others what to do, and the rest following the master in so-called 'slave' mode (standard terms used in syncronized setups). Inside each folder is a 'config.xml' file. These files must NEVER be renamed which is why they are stored in separate folders.



- 3. Copy the config file from the 'Master' folder to the root of one of the displays SD card. It doesn't matter which display is set to master, as long as 1 and only 1 is set.
- 4. Copy the config file from the 'Slave' folder to the root of the SD cards on all remaining displays in your setup.
- 5. When all displays hold an SD card with a config file and a movie (one display being master and the rest being slaves), turn on power on all displays. While the Fusion connection is being established, the master display will show the message "Discovering slave devices... Found:" followed by the number of slaves it has found so far. (NOTE: You might never the final count, as playback will start as soon as possible.) The slaves will show "Waiting for connection..." until they are found.
- 6. Once connection is established (1-2 minutes) the displays will start to play and loop in frame-accurate synchronization = Fusion.

### WHY IS THIS NEEDED?

The config.xml files are used to configure all the available settings on the Dreamoc displays. In the case of a Fusion setup, the config files turn on Fusion mode, help define one display as master and the rest as slave units, tells the master unit how many slave units are in the installation, what the expected duration of the movie is (in order to automatically reboot the system if playback should stop for whatever reason), plus what the light and audio level should be in the displays.

NOTE: To test if your Fusion setup is connected properly, you can download test content and config files from the support page according to the number of displays in your setup.

### NOTE:

When your movies loop there will be a pause of 8 seconds. To avoid seeing this pause too often, it is recommended to create movie les with several loops of the same animation, resulting in a longer duration and a rar- er pause. We recommend .mp4 format with a maximum bitrate of 40Mbps.

