CLS

PDF instructions

Instructions for the video: How to address a DMX unit

Important notice before starting!
When setting the DMX values, it is important that your DMX controller can send fixed values. If you work with percentages, the settings will not be correct. So before you start following the video, make sure your system can send fixed values ranging from 0 to 255.

Equipment:

In this video, we are using RGBW fixtures, a DMXCat® controller, and the DMXCat® app. Ensure that you have your preferred DMX control setup ready, along with the fixtures. The values demonstrated in this video apply universally across all DMX control systems. You will also need a magnet to change the address of our fixtures.

Connecting the controller:

Before beginning the configuration process, the controller must be connected your DMX-Universe. This can be done using a cable or any other method supported by your controller. In the video, we connected the controller to the track using a cable.

If you are also using a DMXCat® controller, press the round button on the controller after connecting to the track or fixtures. The indicator light will begin to flash, and you can then locate the device within the DMX app under ***Connect to Device*** in the settings. Select the device in the app that matches the code of your physical DMXCat® controller. The code can be found on the back of the controller.

After connecting:

Once the DMX device is connected in the DMXCat® app (indicated by a steady green light), tap the gear icon in the top-right corner of the app. Set the app to use decimal values and ensure the controller interface is set to “Keypad” mode. ***These settings are specific to the DMXCat® app and controller.***

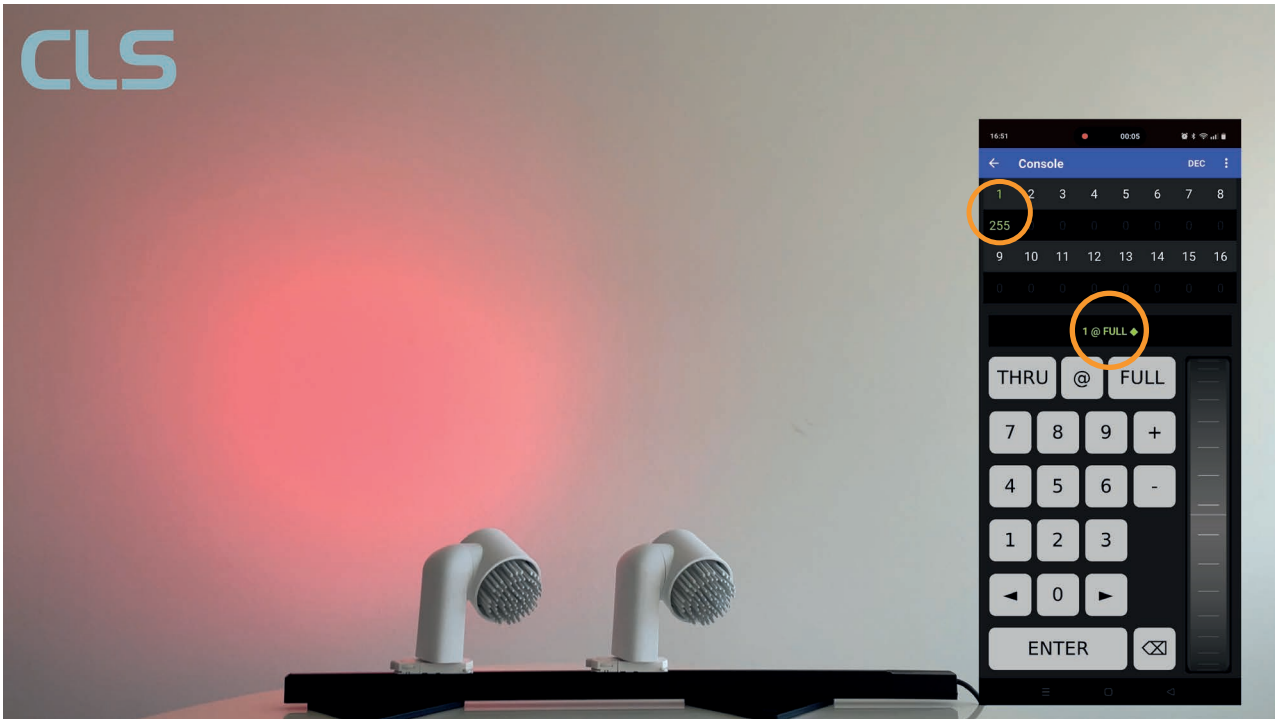
The DMX ***values*** shown in the video are essential and apply regardless of which DMX control system you are using.
If you’re using a different controller, make sure to apply the same values shown, even if your interface looks different.

The settings are now correct for the DMXCat® app to follow the video. Select the DMX controller icon in the main menu to continue.

Testing DMX:

By default, our fixtures are set to start address 1. To verify that the fixtures we're using are indeed configured to start address 1, we'll test the output of channel 1 by setting its value to 255 (also referred to as full).
On the keypad, enter 1@255 **or** 1@full, then press Enter.

After pressing Enter, both fixtures should emit red light.
If this does not happen, one or more fixtures may not be set to start address 1. To reset a fixture to its factory settings, refer to **02:55** in the video and title **resetting a fixture to factory settings on page 5.**

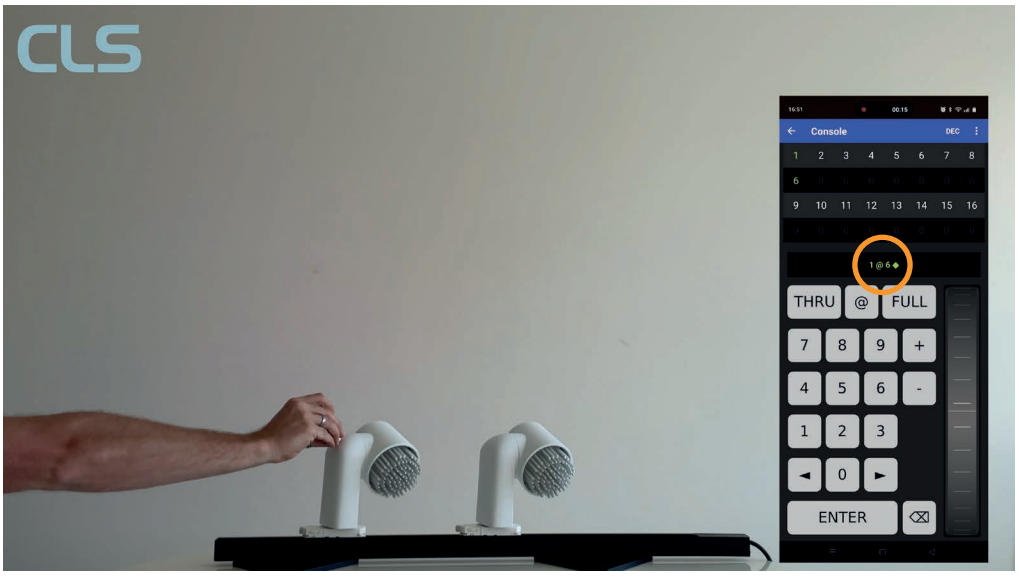


Setting a fixture to a different start address:

Next, we'll configure one of the fixtures to use a different start address. In the video, we choose start address 6. Each fixture occupies four DMX channels – one for each colour in RGBW (Red, Green, Blue, White).

To assign a new start address, type 1@ followed by the desired address using the keypad.
In our example, this is 1@6. Then press Enter.

Once Enter has been pressed, hold the magnet against the fixture until it flashes three times. ! Refer to the manual of the fixture you are using to see where the magnet should be placed on the fixture. You'll find this information in the manual under the heading Programming. The manual also contains the DMX tables for other functions.



In the manual:

Below, you can see one of the programming tables found in your fixture's manual. The table shows additional functions that can be programmed, and the full set of tables can be found under the heading Programming in the manual. We'll be using a function from the table later in the video.

PROGRAMMING TABLE				
DMX	**Function**	**Data**	**Parameters**	**Description**
CH1	Set address 001 to 255	0	0 = no change	Use this DMX channel to set address from 1 to 255. (DMX address is called "n")
		1...255	DMX address = 1...255	
CH2	Set address 256 to 508	0	no change	Use this DMX channel to set address from 256 to 508. (DMX address is called "n")
		1...255	DMX address = 256...508	
CH3	Static behavior	0	no change	If no DMX is present the fixture will respond like set in this function.
		1	last DMX value	
		2	output off	
		3	load static values	
CH4	Soft dim	0	no change	When dynamic softdim is activated an extra DMX channel behind the colours and/or master controls the soft dim reaction. If fixed no extra DMX channel is used.
		1	off	
		2	Dynamic	
		3-250	Fixed interpolation delay	
CH5	Master control	0	no change	If master is first channel is selected the channel will be DMX channel "n". If master is last channel is selected the channel will be "n+x" ("x" is calculated in the output patch).
		1	no master used	
		2	master is first channel	
		3	master is last channel	
CH6	Output 1 patch	0	no change	Each output channel can be patched to respond to the desired DMX channel. This enables the user to mix up the colours according to the controller that is used. **Example: all outputs are patched as 1** All outputs will be controlled by DMX channel "n". If master is used total DMX channels will be 2 otherwise it uses 1 channel ("x" = 1). **Example: output 1&2 are patched as 1 and 3&4 are patched as 2** Output 1 & 2 will be controlled by DMX channel "n". Output 3 & 4 will be controlled by DMX channel "n+1". If master is used total DMX channels will be 3 otherwise it uses 2 channels ("x" = 2).
		1	DMX channel n	
		2	DMX channel n+1	
		3	DMX channel n+2	
		4	DMX channel n+3	
CH7	Output 2 patch	0	no change	
		1	DMX channel n	
		2	DMX channel n+1	
		3	DMX channel n+2	
		4	DMX channel n+3	
CH8	Output 3 patch	0	no change	
		1	DMX channel n	
		2	DMX channel n+1	
		3	DMX channel n+2	
		4	DMX channel n+3	
CH9	Output 4 patch	0	no change	
		1	DMX channel n	
		2	DMX channel n+1	
		3	DMX channel n+2	
		4	DMX channel n+3	
CH10	Static output 1	0	no change	Each output channel can be set to a static intensity. If no DMX is present and Static behavior is set to "load static values". The outputs will be set to the configured intensity values.
		1	output off	
		2...255	intensity 2...255	
CH11	Static output 2	0	no change	
		1	output off	
		2...255	intensity 2...255	
CH12	Static output 3	0	no change	
		1	output off	
		2...255	intensity 2...255	
CH13	Static output 4	0	no change	
		1	output off	
		2...255	intensity 2...255	
CH14	Load default settings	0	no change	This function resets all settings to the Factory setting.
		1	Load Factory settings.	

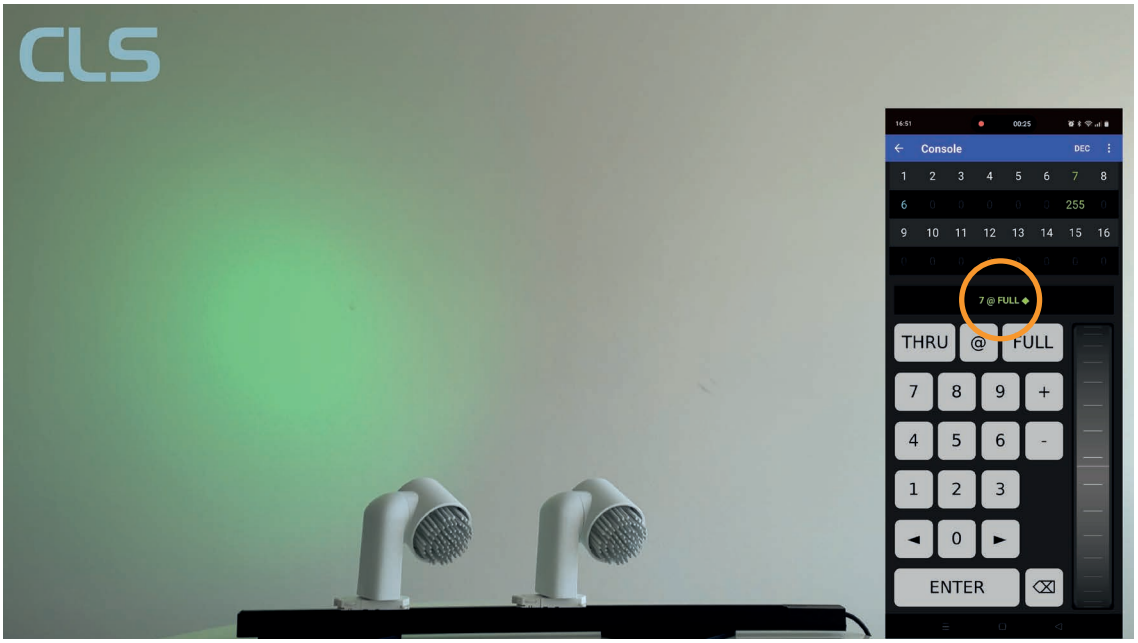
Continue with the video and the accompanying instructions on the next page.

Verifying the new start address:

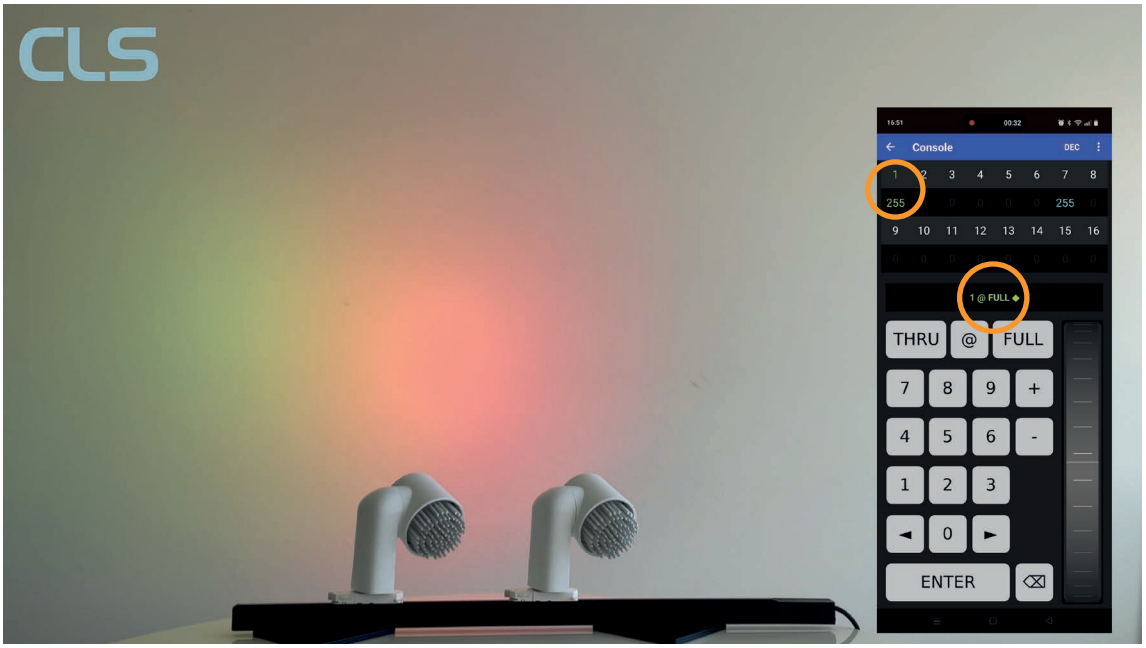
To check whether the fixture has correctly stored address 6 as its new start address, we'll test channel 7 by setting it to 255 (or Full). This should produce a green light. Each RGBW fixture uses four DMX channels, starting from its assigned start address. The channel layout is as follows when starting at start address 6:

R = 6
G = 7
B = 8
W = 9

To perform the test, enter 7@full (or 7@255) on the console, then press ***Enter***. The fixture that was just assigned start address 6 should now emit green light.



The other fixture is still set to start address 1. To check this, we set channel 1 to full, or 255. The fixture with start address 1 should now display a red colour. On the keypad, enter 1@full (or 1@255) and press Enter.



Resetting a fixture to factory settings:

As shown below, we will use a pre-programmed function to reset the fixture to its factory settings. This is done via channel 14, which is the only channel with the factory reset function pre-programmed.

CH14	Load default settings	0	no change	This function resets all settings to the Factory setting.
		1	Load Factory settings.	

The steps to resetting a fixture to factory settings:

To reset a fixture, we'll take the one set to start address 6 and reset it to start address 1. In the console, type **14@1** and press Enter. Then hold the magnet to the fixture until it flashes three times. If everything has worked correctly, the fixture will now be set back to address 1. Since channel 1 is currently at 255, the fixture will immediately light up red, confirming that the reset was successful.