DMX Lighting

For more information about DMX lighting fixtures...check out this article.

For more information about the DMX protocol...check out this article.

Setting up DMX lighting in Horizons

This tutorial will guide you in setting up an RGB or RGBA lighting fixture in Horizons and set them to follow the alert statuses and (automatically generated) special effects.

DMX settings are controlled by 3 sections in the Designer:

1. “DMX” under the “Controllers” heading, which handles selecting the DMX controller used, and the heartbeat speed for the DMX. This setting is useful for cheaper DMX lights that can’t handle the DMX speed. (Covered in Step 3)
2. “Devices” under the “Advanced” heading, which handles the individual types of DMX devices used. (Covered in Step 4)
3. DMX settings per event are managed in the Designer is under “Modules” (Covered in Step 5)

Note: As of release 28.1, in order to use DMX, the game needs to the launched from the Horizons.exe file in the games bin folder. If you open the launcher, you will need to reconfigure any updates you had to do to the config file and reenable DMX on the DMX Controller page in the Designer.

Sample Fixture 1 - RGB ^ Color ^ Address ^ | Red | 1 | | Green | 2 | | Blue | 3 | Sample Fixture 2 - RGBA

Color	Address
Red	1
Green	2
Blue	3
Amber	4

Sample Fixture 4 - ARGB ^ Color ^ Address ^ | Red | 1 | | Green | 2 | | Blue | 3 | Sample Fixture 2 - ARGB, strobe, fade

Color	Address
Red	1
Green	2
Blue	3
Amber	4

Step One: Plug in DMX lights Daisy Chain

Plug in your devices for setup to the game server computer.

Example: For HedgiePi, this setup includes the Open DMX USB controller, a 5-to-3 pin XLR adapter, and 2 - 6 channel DMX Par lights set up like sample fixture 4.

Step Two: Check the COM Port Settings of the DMX Controller

Open “Device Manager” on the server.

Click on your Windows start menu and type “Device Manager”. Click on the device manager, which will open a window similar to the one shown here. Scroll down to “Ports (COM & LPT)”. Find the USB device for your DMX controller here. Note the number next to COM in the parenthesis.

[Insert Step2_A image here]

Example: On HedgiePi’s computer, the OpenDMX controller is showing up on COM 3.

In the main folder of the game, which in typical installs is found in C:\Program Files (x86)\Starship Horizons, check the config file for Horizons to make sure the port for the DMX controller matches. If not edit this to match and save. If your having trouble finding this specific line in the file, use CTRL+F and type Controllers to navigate to the line.

[Insert Step2_B image here]

If you had Horizons open when making this change, be sure to close and reopen Horizons for this setting to take effect. Note: As of release 28.1, in order to use DMX, the game needs to the launched from the Horizons.exe file in the games bin folder, which is typically found in C:\Program Files (x86)\Starship Horizons\Bin. If you open the launcher, you will need to reconfigure any updates you had to do to the config file and reenable DMX on the DMX Controller page in the Designer.

Step Three: DMX Controller Setup

Once fixtures are plugged in and the server is running, open the Designer which is opened like a console from the station select screen. Open a browser, navigate to localhost:1864, and you’ll see the below screen. Click on “Designer”.

[Insert Step3_A image here]

Once in the Designer, click on “DMX” under the “Controllers” heading in the menu on the left.

[Insert Step3_B image here]

Type in a name for the controller you are using, or leave it as the default name “DMX”. Select the type of controller being used from the drop down, which should be listed on the device you are using as the DMX controller. The heart beat settings largely depend on your lights and what rate they handle. Depending on your devices, you may need to check the “Constant Delivery” check box as well. Turn the “Enabled” toggle on and click “Save”. If you have multiple controllers, you can add them here, but only one is necessary in most setups.

Example: HedgiePi using the following setup for the DMX controller.

[Insert Step3_C image here]

Step Four: Add DMX Devices

We're going to start with adding 2 devices: "DMX Effects" and "DMX Alerts", so that different DMX lights in our environment can be used for different utilities. The effects lights will activate for in game effects such as taking hull damage. The alerts lights will show current ship alert status. If you only have one DMX light, just set up one device here.

In the Designer click on "Devices" under the "Advanced" heading on the left.

[Insert Step4_A image here]

Click "Add A Device" to bring up the Add Device Wizard. The first window is a welcome to the wizard. Click "Next". For the first device, "DMX effects", input the desired name and description in the text boxes. Click "Next".

[Insert Step4_B image here]

Next, select "DMX" for the Device Type, which will automatically take you to the next screen in the wizard.

[Insert Step4_C image here]

In the next step of the wizard, you will need to know which format your device uses. If you don't know and don't have a device manual to reference, some guess and check can help here (using another DMX software, such as FreeStyler or QLC+, is helping in doing this quickly). If your lights are not one of the options, pick the closest. We can edit the format manually later. Clicking the desired device format will automatically take you to the next screen of the wizard.

Example: HedgiePi's DMX lights are actually 6 channel (like sample fixture 4), but the first 4 channels are ARGB, so HedgiePi chose ARGB as the DMX Device format.

[Insert Step4_D image here]

Next, you'll need to select the starting channel for the device. Then click "Next". Example: Since this is the first device being used, HedgiePi is picking channel 1.

[Insert Step4_E image here]

Step Five:

Troubleshooting: