Nov 6th 2018

Set Up DMX OUT

DMX OUT allows Aurora Pro to control DMX-compatible fixtures. Users can sync a single universe of DMX fixtures (512 channels) with Aurora Pro. For example, Aurora Pro supports 170 DMX fixtures that have 3 channels of control for RGB (512 ÷ 3 = 170). Users can also use DMX OUT in conjunction with Aurora Pro's other outputs e.g. built-in native connectors, NDBs, or other ethernet based lighting output protocols.

Note: Aurora can only control fixtures that have RGB color control.

Required Components

- Aurora Pro

- DMX fixtures

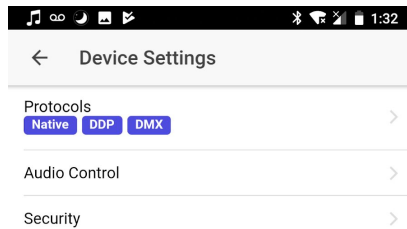- Minleon RGB+ fixtures (optional)

Enable DMX OUT Mode

Users must have the Aurora Mobile App V1.5 or higher to use DMX OUT. The software version on your Aurora Pro box must also have V1.5 or higher.

Refer to https://support.limbicmedia.ca/software-updates/ for the Aurora Pro software update. The mobile update will happen through the Apple app Store or the Google Play store.
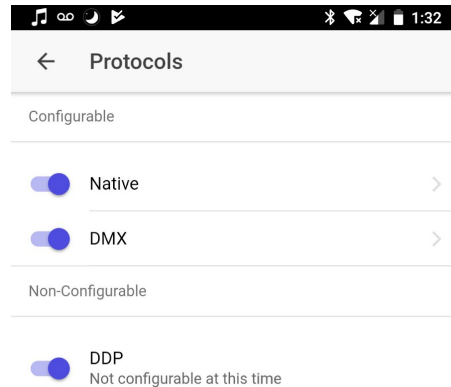
Method

1. Download and install the Aurora Mobile App and connect to Aurora Pro.

2. Connect Minleon RGB+ Fixtures to Aurora Pro's built-in Minleon RGB+ connectors (optional). Refer to **Configure the Aurora Mobile App** to adjust settings for Minleon RGB+ fixtures.

3. Connect DMX fixtures to Aurora Pro's DMX OUT port.

4. Ensure that the FUN (function) switch on the Aurora Pro connector interface is in the down position (OFF).

5. Navigate to *Device Control > Device Settings* in the Aurora Mobile App and select *DMX* under *Protocols* (Fig. A):

Fig. A: Device Settings *page*

6. Enable *DMX*. If you are also using the built-in lighting ports, enable *Native* (Fig. B):

Fig. B: Protocols *Page with Native, DMX and DDP enabled.*

NOTE:
DDP works but cannot be configured at this time.

Add DMX Fixture Profiles

The Aurora Mobile App has a number of generic fixture profiles built-in. You can also create custom DMX fixture profiles and assign the Red, Green, and Blue control to the relevant channels. Furthermore, you can set static values for the non-RGB channels that are not being controlled by Aurora. For instance, the White channel or pan and tilt.

<mark>NOTE:</mark>
<mark>Grid-mapping and smoothing are currently in development.</mark>

Method

1. Navigate to the *Protocols* page and select > next to *DMX* (Fig. B).

2. Select > next to *Edit Profiles* (Fig. C) to view *Fixture Profiles* (Fig. D). *Fixture Profiles* lists generic DMX fixtures that Aurora Pro recognizes by default.
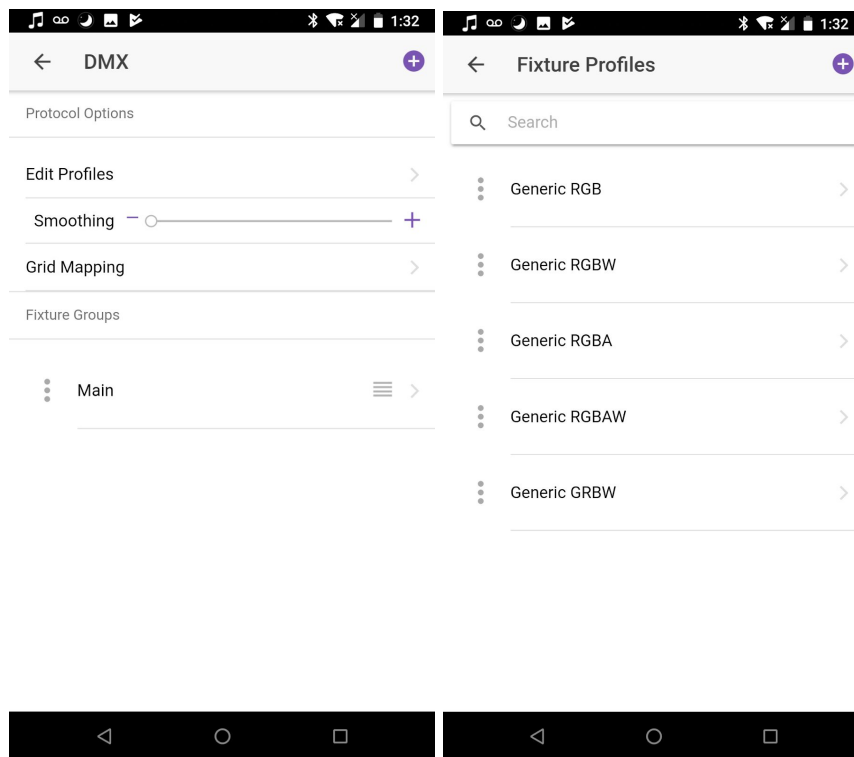

Fig. C: DMX *page*   *Fig. D:* Fixture Profiles *page*

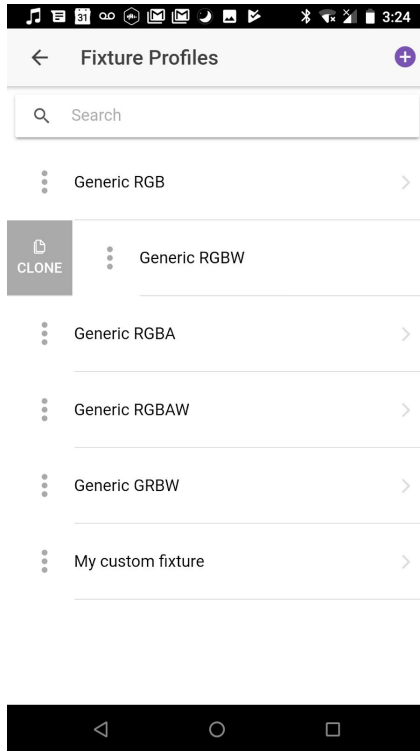3. Select ⁝ to clone a generic fixture profile (Fig. X):

Fig. X: Clone a fixture profile

4. Select > next to each default fixture profile to view each fixture profile's attributes. Fig. E shows settings for the Generic RGB fixture profile attributes.
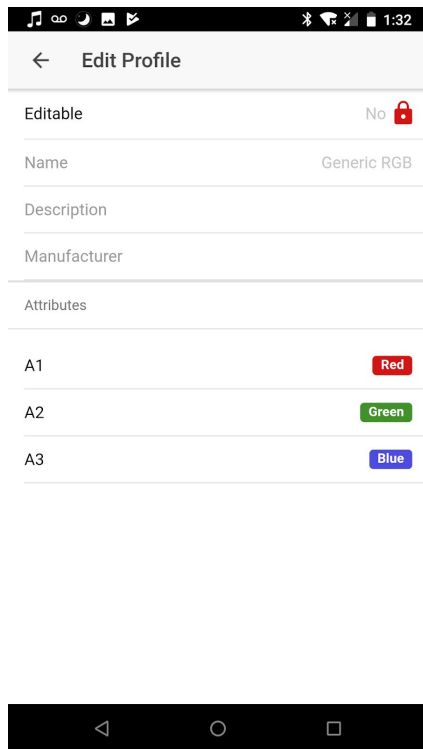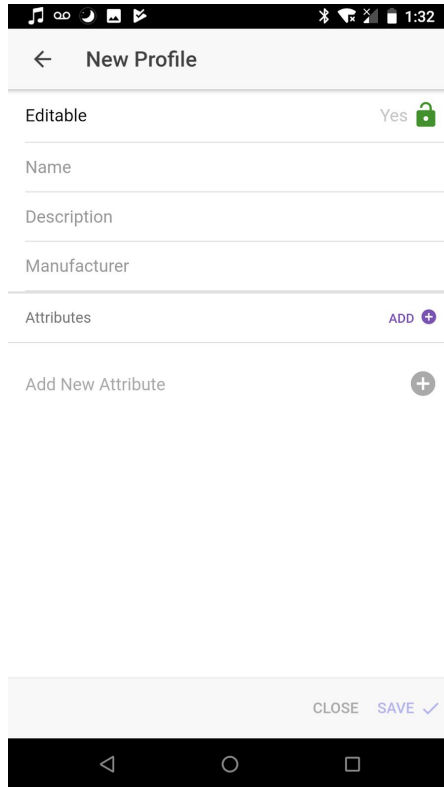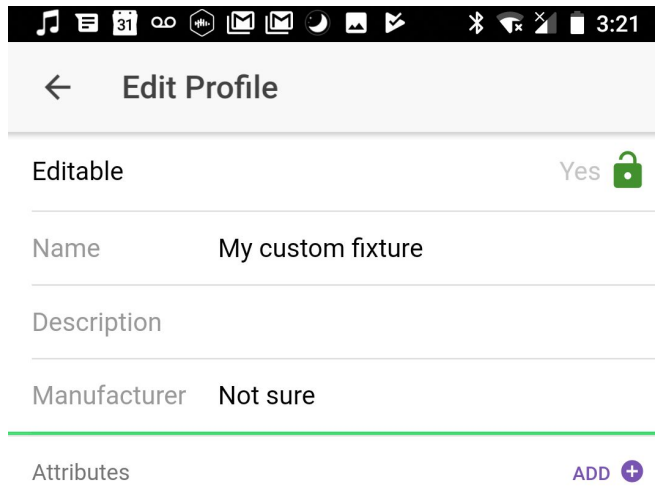

Fig. E: Generic RGB fixture profile

5. Navigate back to *Fixture Profiles* and select ⊕ to add a new custom fixture profile (Fig. E):

Fig. E: New Profile *page*

6. Enter the new fixture profile name, description, and manufacturer (Fig. Y):

Fig. Y: New fixture profile information

7. Select *Add New Attribute* to create attributes to the new fixture profile (Fig. F). Refer to your specific DMX fixture manual for its DMX channel specification.
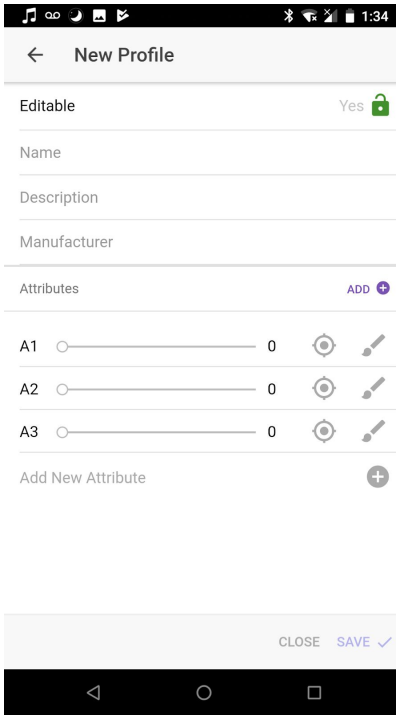
Fig. F: New Profile *page—add attributes.*

8. Rename an attribute by selecting ⊚ . This is useful for labeling non-RGB attributes such as a white channel or strobe.

9. Select ✎ to assign color attributes (Fig. G). Aurora Pro currently only supports RGB output control. See step 10 to set other parameter values, not controlled by Aurora, with a static value.
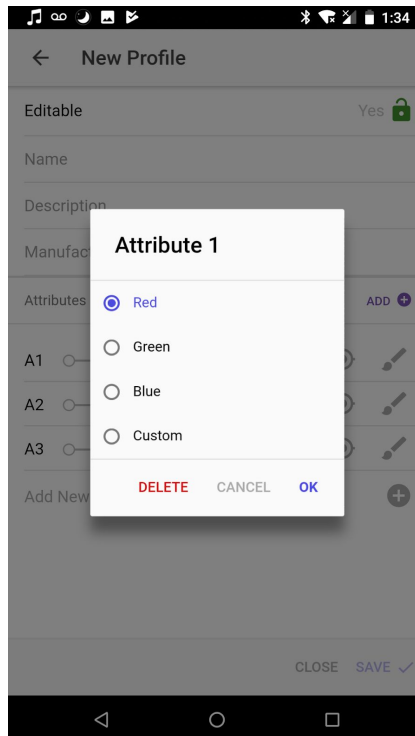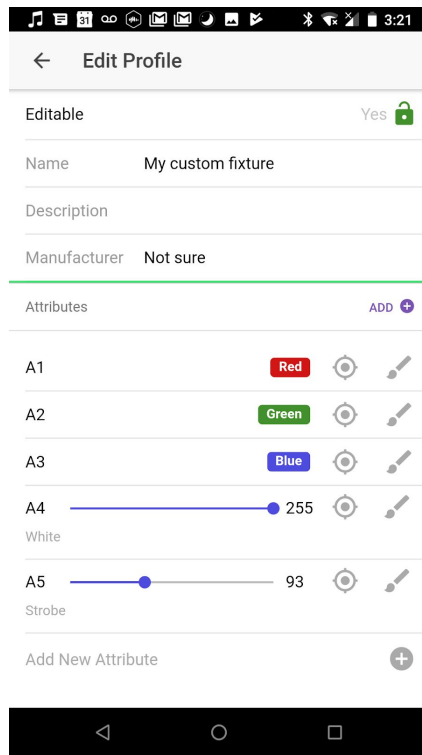

Fig. G: Assign an RGB color attribute. Selecting Custom closes the window.

10. Use the sliders to set static values (0-255) for non-RGB attributes. For example, Fig. Z shows a custom fixture profile assigned with 5 attributes: R, G, B, White (with static value 255) and Strobe (with static value 93):

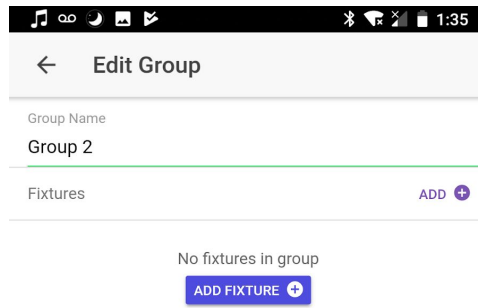*Fig. Z: Custom fixture profile with R, G, B, White, and Strobe attributes added*

11. Save any new fixture profiles.

Add DMX Fixture Groups

The Aurora Mobile App can create DMX fixture groups. This allows you to create a number of DMX fixtures with the same fixture profile and to exploit the Grid Mapping* function across the group (*still in development).
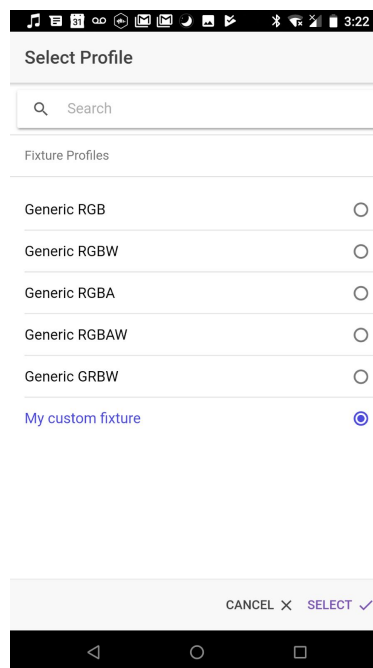
Method

1. Navigate to the *DMX* page (Fig. C) and select ⊕ to add a fixture group (Fig. I).

Fig. I: Edit Group *page*

2. Rename the fixture group and select *ADD FIXTURE*.

3. Select a fixture profile. The list (Fig. V) contains generic fixture profiles and any previously saved custom fixture profiles. Refer to **Add DMX Fixture Profiles** to create a new fixture profile.

Fig. V: Select Profile page with My custom fixture *selected*

4. Set the *Universe* to 0, the *Address* to the base address of the first fixture in the group, and the *Count* to the total number of fixtures in the group (Fig. J). In Fig K, There is a 2nd group with 30 fixtures in it. The address has been manually set to 61 to avoid any collision with the first group.
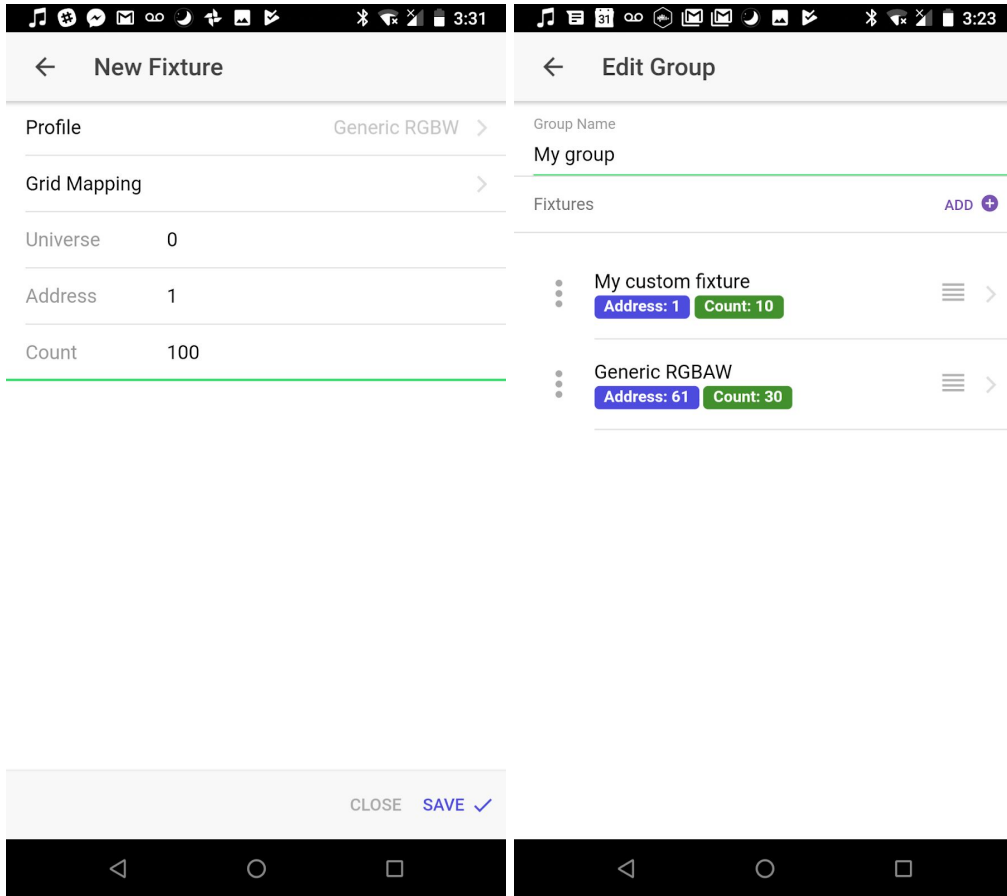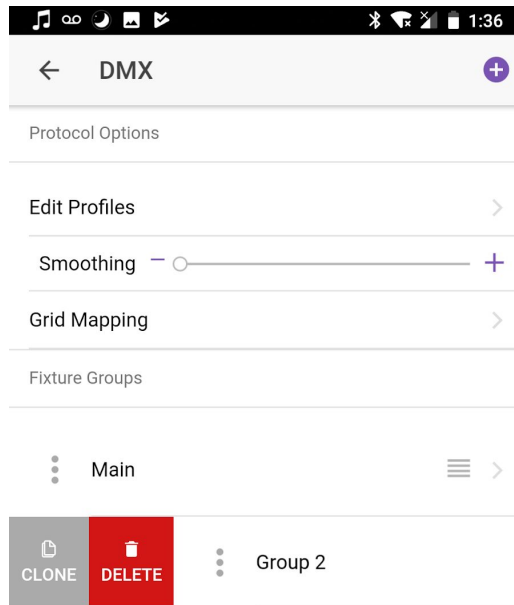

Fig. J: Add new fixture in a fixture group   *Fig. K: Fixture group with 2 fixture profiles*

5. *Save* any new fixture groups.

6. Navigate back to the *DMX* page to add or view fixture groups.

7. Select ⋮ to clone or delete a fixture group (Fig. L).

Fig. L: DMX *page with a new fixture group*

DMX Smoothing*

Using the smoothing slider (Fig L) you can smooth the output of data to the DMX fixtures. A value of 100% will freeze the lights. A value of 0 will not perform any smoothing.

Note: *This feature is available with Aurora Pro software version 1.6 or later.*