Compatible Fixtures and settings

Direct Control

The xy to RGB tools expect
the user to have direct control of each differently colored LED. Many fixtures have calibrated color spaces, uniquely generated for their fixture so that they can be controlled with only RGB channels. There are several reasons that manufacturers do this but the xy to RGB tools in Pocket Best Boy analyze the channels as being separate spectral power curves. This requires the user to be able to turn each separate color emitter up to full, while all others remain off. In a calibrated color space, this is not usually possible for the user to do.

While work is underway to provide users with default lookup of these calibrated spaces, the following is a list of known fixtures that **cannot yet be used** in the xy to RGB tools:

Any Astera fixture (compatibility coming July ‘23)
Any Fiilex fixture
Litegear Spectrum fixtures
Any Aputure fixture (results are inconsistent here. While Aputure uses white chips, not enough data has been collected to determine whether they are employed in their RGB modes. For now, use caution.)

The following is a list of known fixtures that **can be used** but must be put in the correct mode with proper settings:

Any Arri fixture - must be in any RGBW or RGBW crossfade mode and Color Space must be set to “Direct Control” NOT “Calibrated Color” in the Light controls menu.
Any Kino Freestyle fixture - must be set to either profile 29 or 30 (xfade CCT & TDRGB) over DMX control only. Color Space and Camera Curve should also be set to “KF Default.”

Any “Dumb Dimmer” for LED Ribbon or a home-made fixture is **fully compatible**.

PWM vs. Constant Voltage Dimming

PWM (Pulse Width Modulation) is a form of dimming that ensures the spectral curve remains as similar as possible throughout the dimming range. Constant Voltage is a form of dimming that

uses a change in voltage to dim a light's output. Voltage changes can have a significant effect on the spectral curve for each color. As such, it is not a form of dimming that can produce reliable results using the xy to RGB tools in Pocket Best Boy.

Luckily, most of the fixtures we use for Film/TV use PWM dimming.

Constant Voltage dimming is utilized mostly for high-speed work. As such, there are some fixtures that utilize it 100% of the time and other fixtures that only employ it in a "high-speed" mode. If your fixture has a high speed mode, make sure that it is not set to that mode before taking any measurements and know that colors may not remain the same when enabling the high speed mode.

Nanlux fixtures are known to always utilize constant voltage dimming.