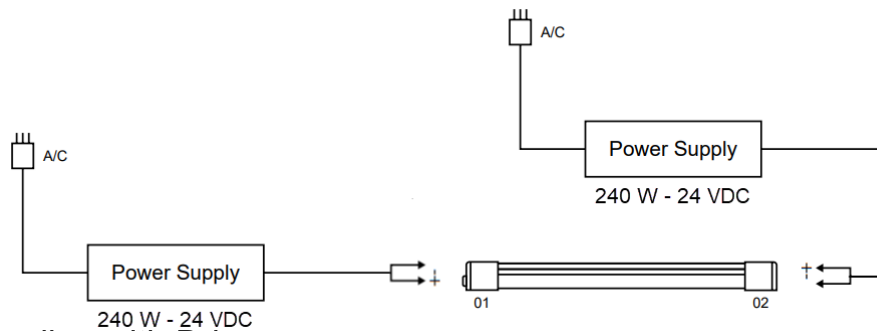


FloppyFlex Double-End Feeding

Longer Runs with Double-Feeding

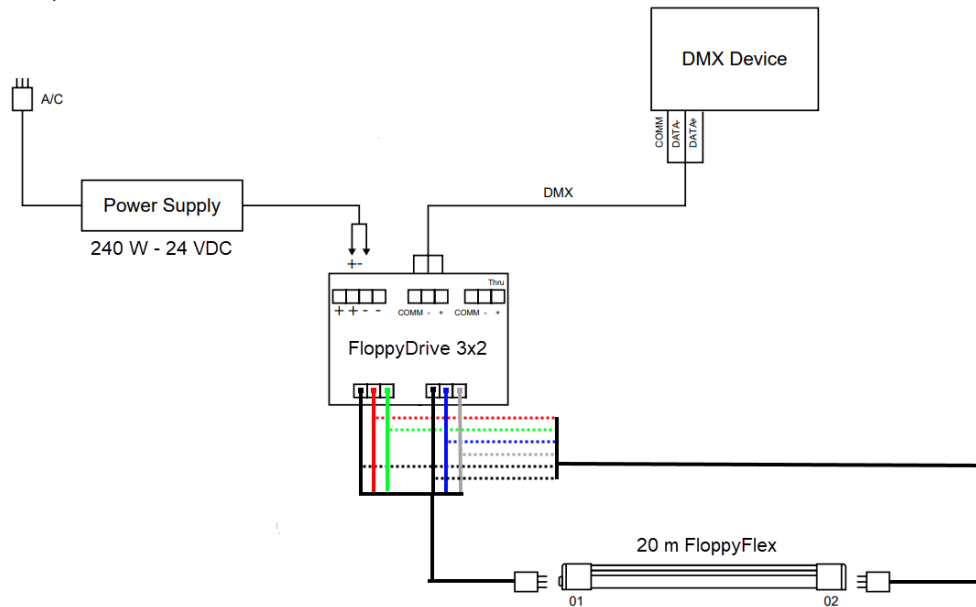
Voltage drop issues are not particularly evident at the beginning of LED strips because at that point the voltage is still reasonably optimal for LEDs to illuminate. However, by the time the current travels to the end of the strip, you start to see dimming problems. This is because voltage drop continues to increase the further you send the current so that the most loss is at the end of the run.

One way to cheat this is to send two leads from PSU to attach both at the beginning and end of the run. When powering from both sides, the lowest voltage will be in the center of the run, effectively halving the voltage drop and lessening the perceptible effects. Of course, there is still a Max Run specification that cannot be ignored, usually in the case of Double-end feeding, you can get twice the amount of length on a FloppyFlex Run. This is especially easy with single-color products.



Double-End Feeding with Drives

With Double-End Feeding, we are increasing the max run length and power consumption. However, the circuit design of the FloppyDrive safely allows only a specified amount of power per output and may not be suitable for double-end feeding as-is. We can solve this by spreading out the connection points over both outputs. In the example below using RGBW FloppyFlex and 3x2 drive, you can spread each color over the 4 connection points in Output 1 & 2. Since each connector allows 2.5 Amps current, this setup allows enough headroom to handle the extra power consumption of a max double-end feed of 24 meters (15W/m).



Avoiding Voltage Drop With FF&FT-v1.0- 28 August 2020