

Products Affected:

CTI# 5520 WDS 15A Dimmer

Overview:

A change has been made to the WDS 5520 Dimmer to provide it with a special dimming profile that is optimized for LEDs.

Details:

This upgrade adds a new configuration setting to the 5520 Dimmer that is optimized for dimming/driving LEDs. It includes provision of a specialized dimming curve, combined with high speed PWM, creating a smooth and pleasing dimming response that is free of the annoying stepping and jitter exhibited in LEDs when controlled with conventional incandescent PWM dimmers.

This upgrade also corrects the Dimmer 512 bug (occasional flashing off when addressed at DMX512)

Note: This upgrade requires board level electronics skills and should only be attempted by a qualified service person. Alternatively, CTI can perform this upgrade as a bench repair. Contact City Theatrical for rate and schedule.

Follow these steps:

1. Secure a V 2.3 software chip set from City Theatrical, Inc.
2. Remove the 5520 PCBA from its case.
3. Locate Transistor Q1 and cut the "head" (case) off, leaving as much of the 3 legs as possible.
4. Bend all 3 legs together and solder them together.
5. Replace R11 with a 330 Ω 1/8W resistor.
6. Remove U1 and U4 and replace with the provided V2.3 chip set.
7. Re-assemble the dimmer and test.

The new LED dimming curve is accessed by setting the Mode DIP switch to ON-ON (this setting was previously un-used).

The V2.3 Mode Switch settings are:

OFF-OFF:	ISL (Incandescent) Curve
ON-OFF:	Non Dim (Bump at 50%)
OFF-ON:	Linear
ON-ON:	LED Curve