

Universal Douglas Driver Application Note: Driver Tuning Instructions

Overview

Tuning provides the ability to set a Tunable driver's output current at levels lower than its full output rating. After a driver is tuned, it can still be dimmed to lower output currents with standard 0-10V controls. Tuning does not change the driver's operating output voltage range, as the driver is tuned, the maximum output power for the driver is also reduced by the same percentage.

Tuning Function

Universal Douglas LED Drivers can be configured to set their current output to a selected fraction of their maximum rated design level. This function is called tuning (or also high-end trim) and it can be implemented with the LDTC01A using the Selector rotary switches. Tuning assignments are stored in driver memory and are not lost when power is removed. All factory produced drivers are tuned to maximum output unless otherwise noted on the label.

Tuning SET Levels are listed on individual driver specification sheets. Refer to the driver specifications to correlate a SET Level to an output current.

Programming Instructions

For programming, the LED driver must be powered but a load does not need to be applied to the driver to perform the tuning. The general process for programming an Universal Douglas LED driver using the LDTC01A is as follows:

- **Select** the desired tuning SET level using the Level Selector rotary switches
 - Dial settings of 8-5 represent a SET Level of 85, refer to the driver specification sheet for the associated driver current level.
 - Both dials set at 0 represents maximum output

- **Remove** power from the driver & connect low voltage control leads to the LDTC01A using terminal block, and then reapply power to the driver
- **Press and hold** the Program Button until a solid green light is observed on the Status LED.
 - 3 Red flashes indicate an invalid response from the driver
 - A Solid red light indicates that it is awaiting a response
 - A Solid green light confirms that a valid response was received from the driver.
- **Remove** power from the driver, disconnect LDTC01A, and then reapply power to the driver
- **Reset** as necessary with the same driver; a 0 0 setting will set the driver back to its original 100% level.
- **Multiple** LED Drivers can be tuned simultaneously; however, the Status indicator LED will not function properly when a command is successfully communicated to the LED drivers. The Program button should be held down for at least five seconds to ensure a good command.



LDTC01A; Field programming tool for **Universal Douglas** LED Drivers.