FPD PROGRAMMING TOOL

LED Drivers / LED Control Gear

Output current programmable

VEGA Series

User Manual V2.0.0

professional led applications

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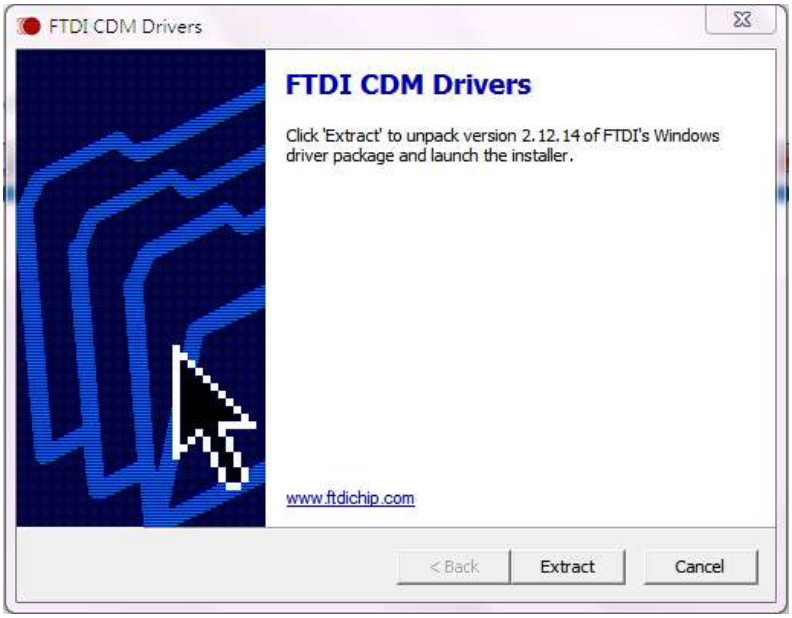
I. Software Requirements

1. FPD PROGRAMMING TOOL

To download “www.tci.it/TCI_tools/FPD_PROGRAMMING_TOOL_127098.zip” and extract the zip file into a directory of your choice. The “setup.exe” is FPD PROGRAMMING TOOL, installer you can just double click it to launch the installer.

2. FTDI Driver

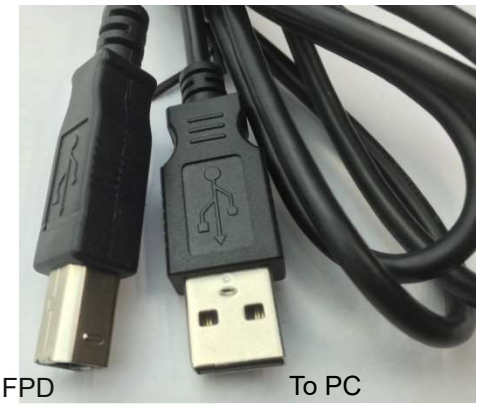
Install the FTDI driver for Windows. Clicking Extract & Click Next



Installation complete and click “Finish” to continue.

II. Connect the device

Step 1. Use a USB cable to connect the FPD PROGRAMMING TOOL to one of your PC's USB host ports.



To FPD PROGRAMMING TOOL

To PC

Step 2. There are “Blue” & “BLACK” two wires coming out from FPD PROGRAMMING TOOL.

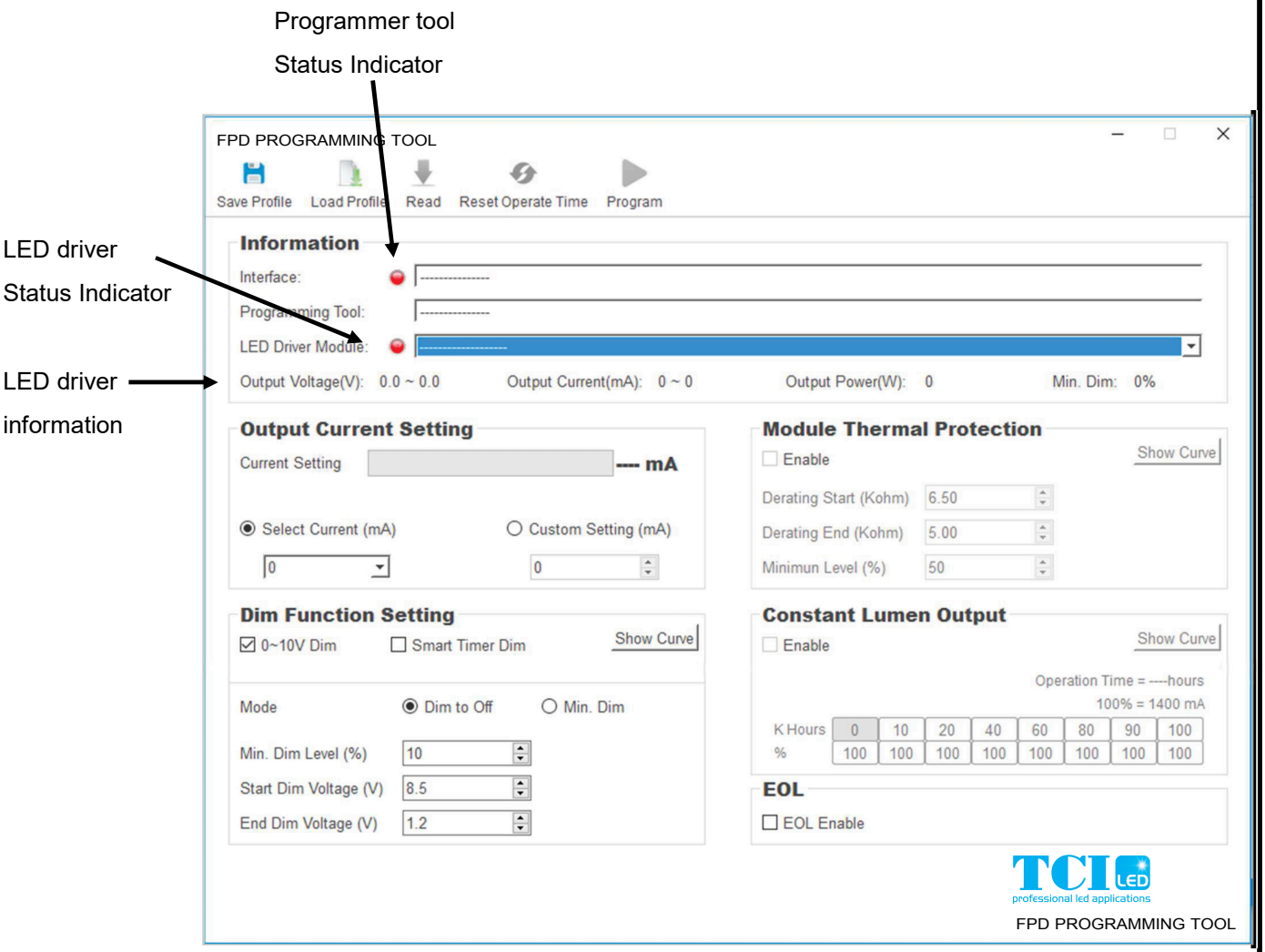
The blue wire connects to LED power driver output, “LED” “-“‘

The black wire connects to LED power driver output, “LED” “PRG/NTC”.

III. Programming functions and interface

Function 1:

Output current change

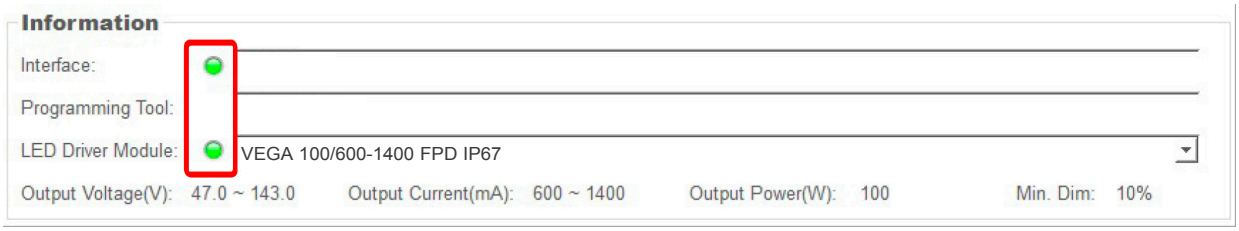


There are two status indicators:

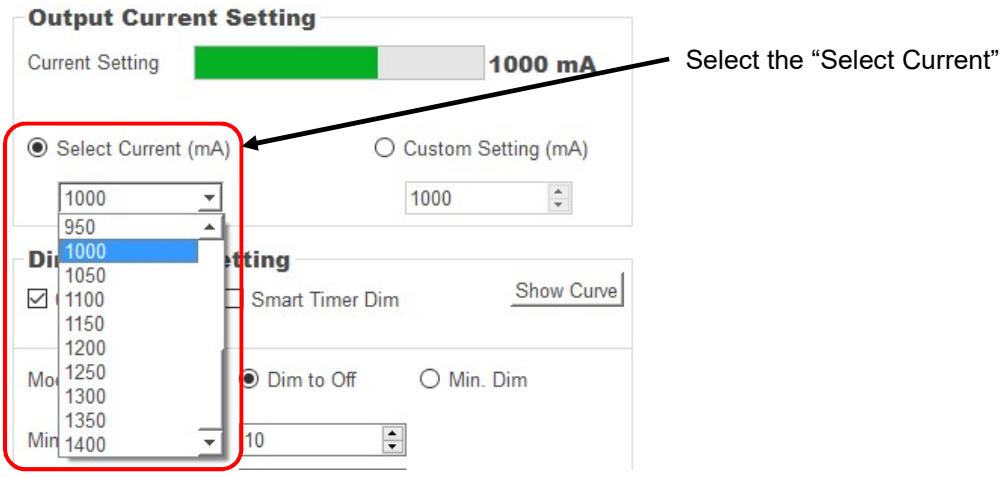
Programmer Tool Status Indicator – Indicates the connection status of programmer tool. **LED Driver Status Indicator** – Indicates the connection status of LED power supply.

STATUS INDICATOR	COLOR	DESCRIPTION
Programmer Tool	Red/Yellow Blinking	FPD PROGRAMMING TOOL not detected. Programming GUI is searching for an FPD PROGRAMMING TOOL.
	Green Solid	FPD PROGRAMMING TOOL detected. The “Interface” field shows “COM XX” for programming tool or “OBID USB Device” for NFC programming tool.
LED Driver	Red/Yellow Blinking	LED power supply not detected.
	Green Solid	LED power supply is connected. The “LED Driver Module” field shows the Model name. Programming GUI will automatically reads all the settings in the LED driver.

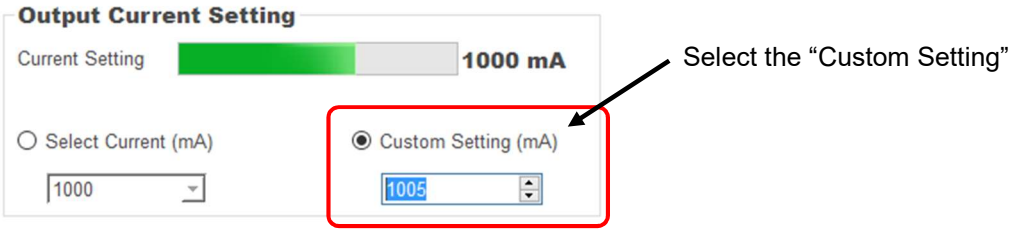
The status indicators must be displayed in GREEN before starting to program.



For speedy setup, to select the desired output current from the drop-down list. (50mA for each step).



If default output current is not desired, you may use “Custom Setting” to change output current. Enter the desired output current value. (1mA for each step)



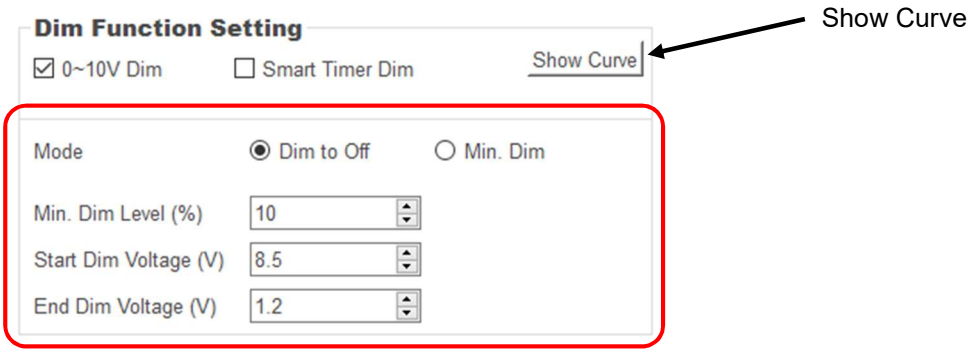
Function 2:

Set the Dim Function to “0~10V” or “Smart Time Dim”.

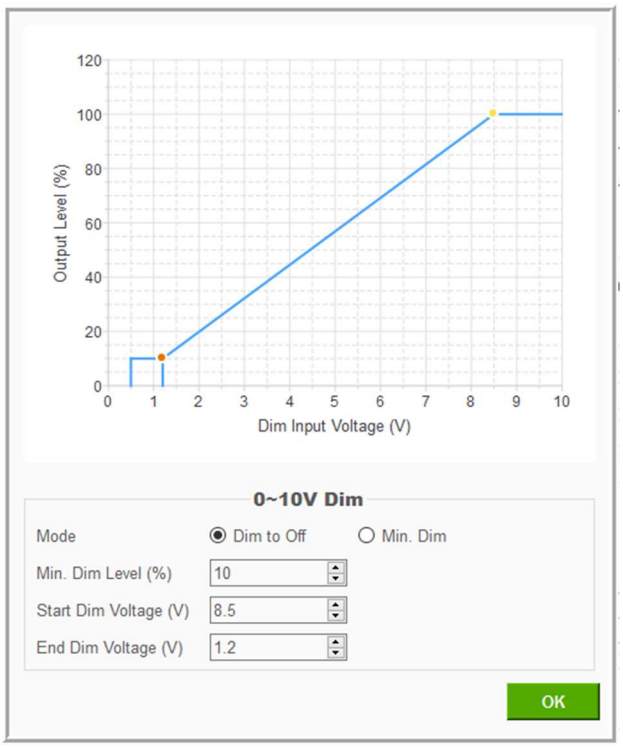
a) 0~10V Dim function

Set the min. dimming mode to “Dim to off” or “Min. Dim”.

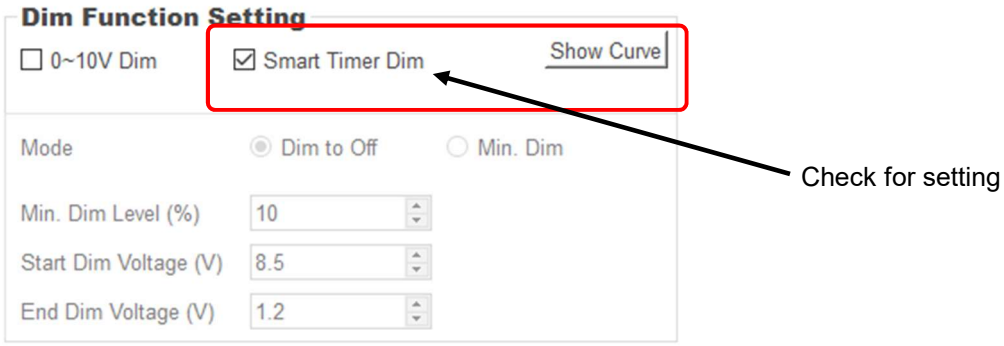
Check the box for “Dim to off” or “Min. dim” selection, this is subject to customer application and dimmer capability.

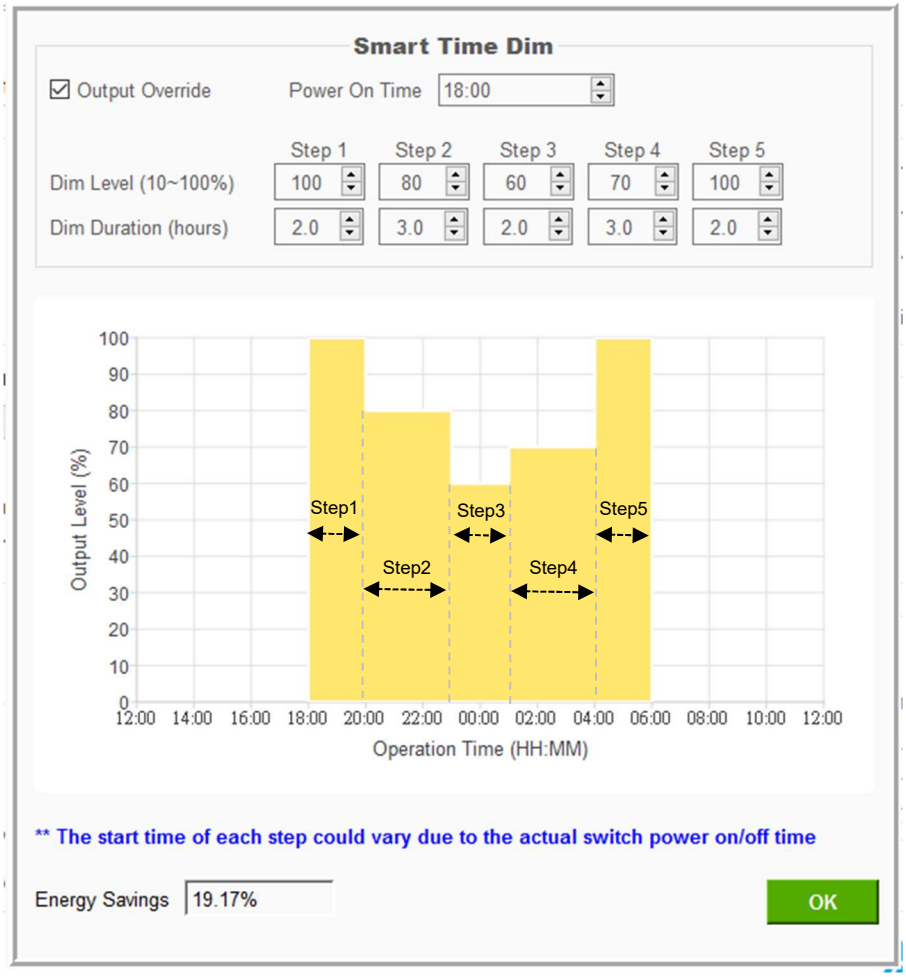


The output level curve can be viewed using the “Show curve” button.



b) Smart Time Dim function





A new window pops up where different parameters can be set for the smart time dim.

The ‘Power on time’ determines the time from which the driver starts power on.

The ‘Dim Dime Level’ can be set in 5 different levels during the on time.

and set the ‘Dim Duration’ for each Dim level (HH:MM).The max duration of any

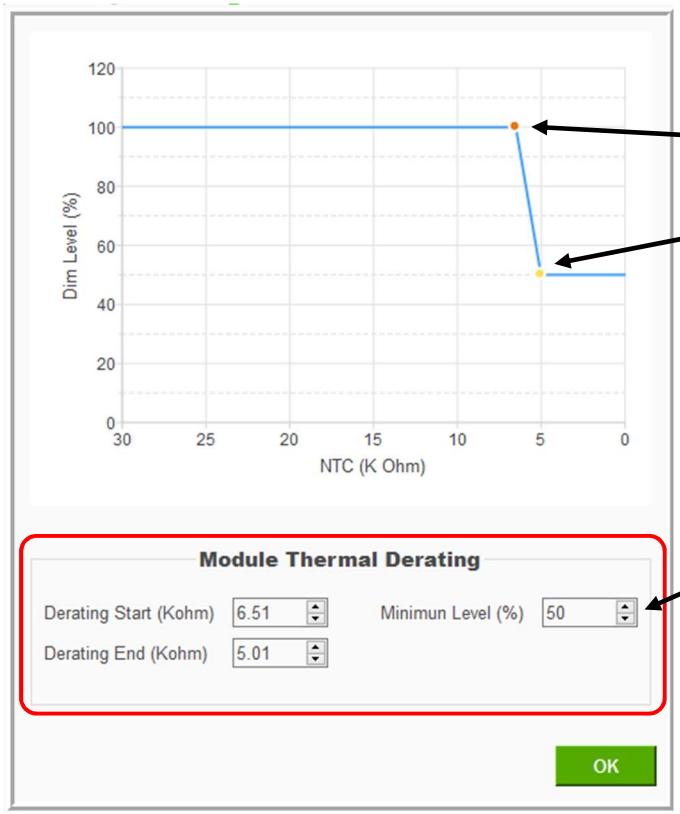
Dim level is 4 hours.

When set the ‘Output Override’ for Human/Photo sensor, short the LED driver Dim+ & Dim- pin, the output Dim level will be rise to 100% (Maximum level).

Function 3:

LED Module Thermal Protection

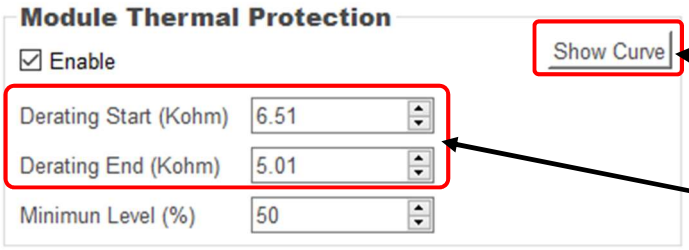
It is disabled by default. NTC has to be connected or built in to LED module when this function is active. The max. value for “De-rating Start” is 30kΩ and De-rating End’ is always less than “De-rating Start’ value and greater than or equal to zero. Set the Minimum Level between 10-100%.



Start point

End point

Value is edible from here as well. From 10% to100%.

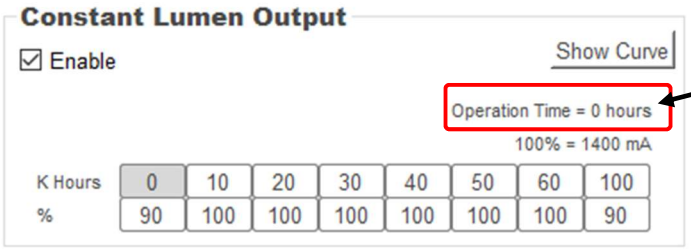


Click to show curve

Input the values

Function 4:

Constant Lumen Output by compensation



LED Module operation period

This function s disabled by default. There are 8 segments to input on the GUI for operation time for K hours and output current percentage.

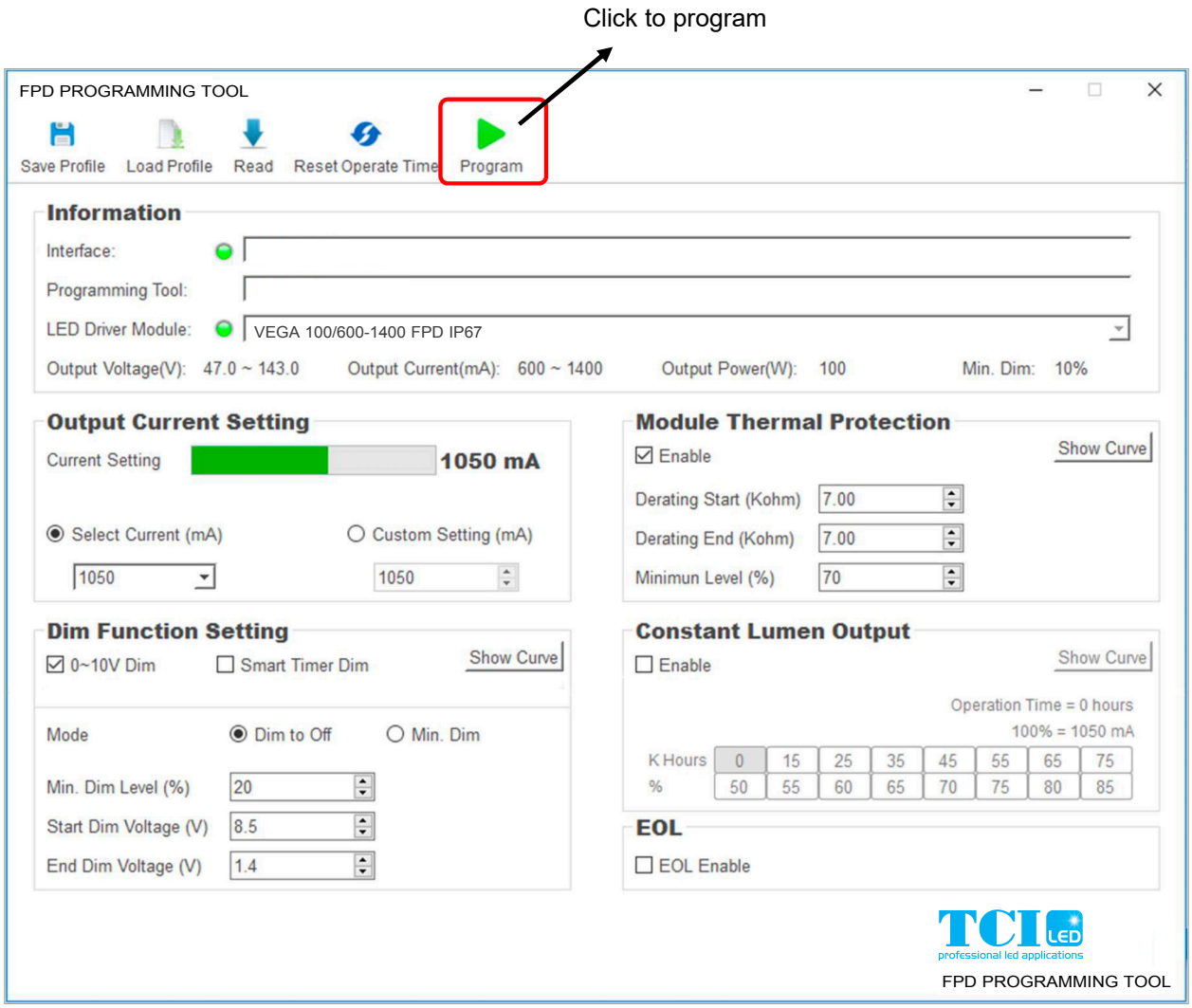
For K Hours: The first cell is '0' (zero) by default; maximum is 50(K Hours) and minimum is 1 K Hours.

For output current percentage: Maximum is 150% and minimum is 50%.

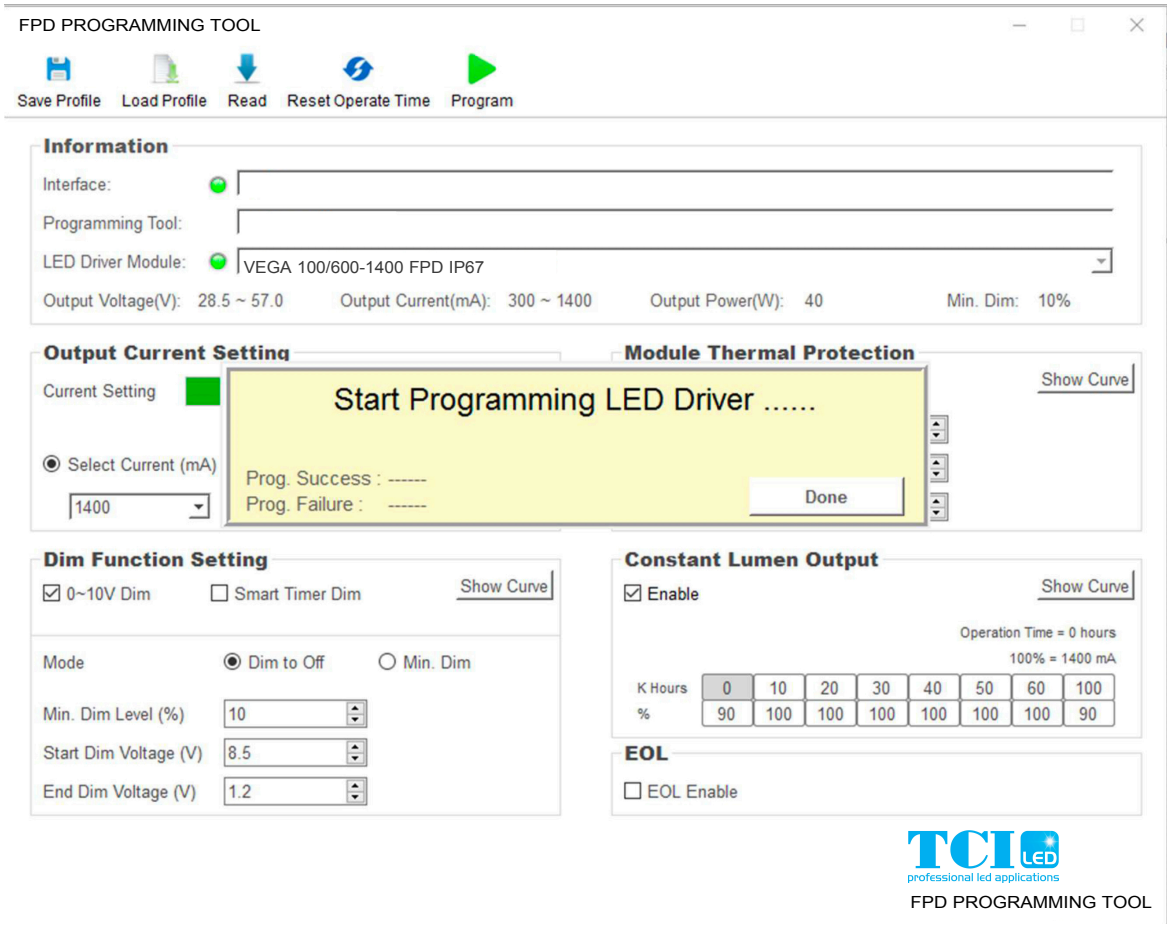
However, if the set output power is over the designed device power, system will pop up an alarm that output current is over and to decrease the output current.

When aforementioned initial setup and functions are decided, start to bring over LED driver to change the output current.

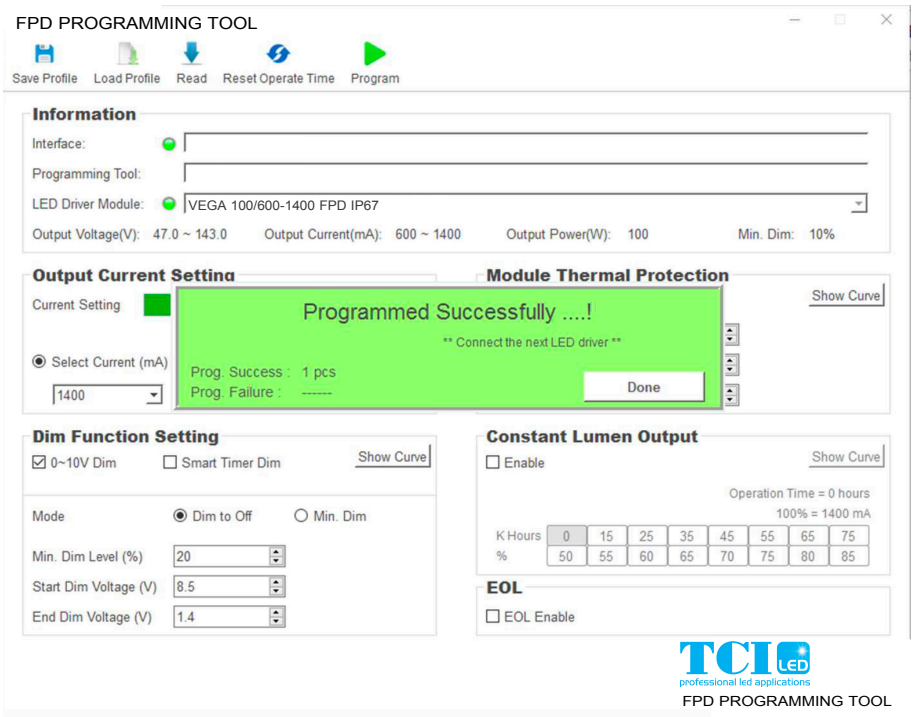
Click the “Program” button to start programming, and all the settings will be programmed into the LED driver.

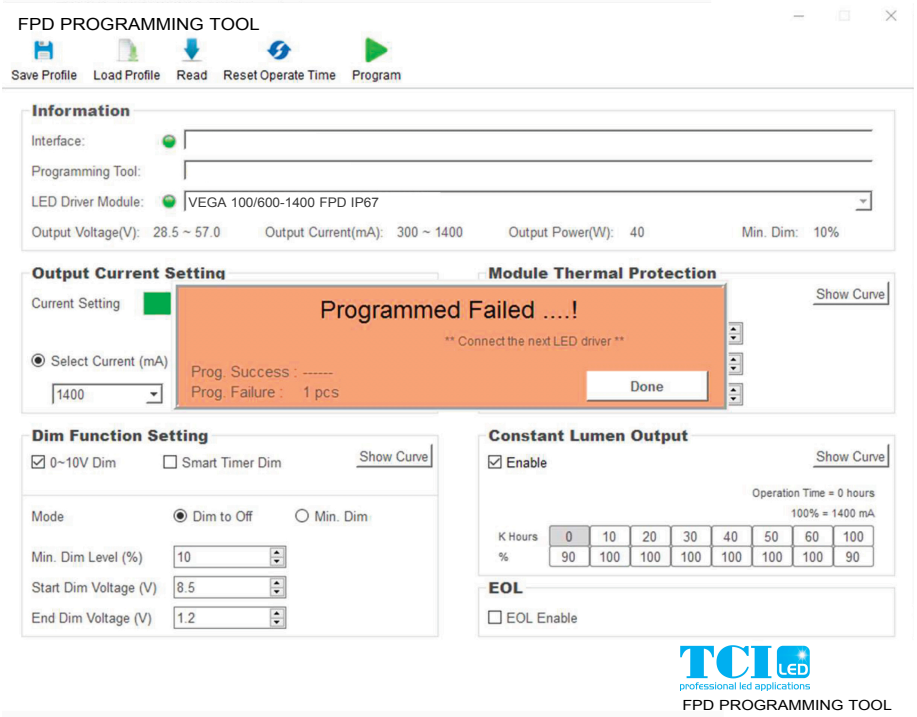


When the programming has started, the programming view pops up and the message "Start Programming LED Driver ……" is displayed.

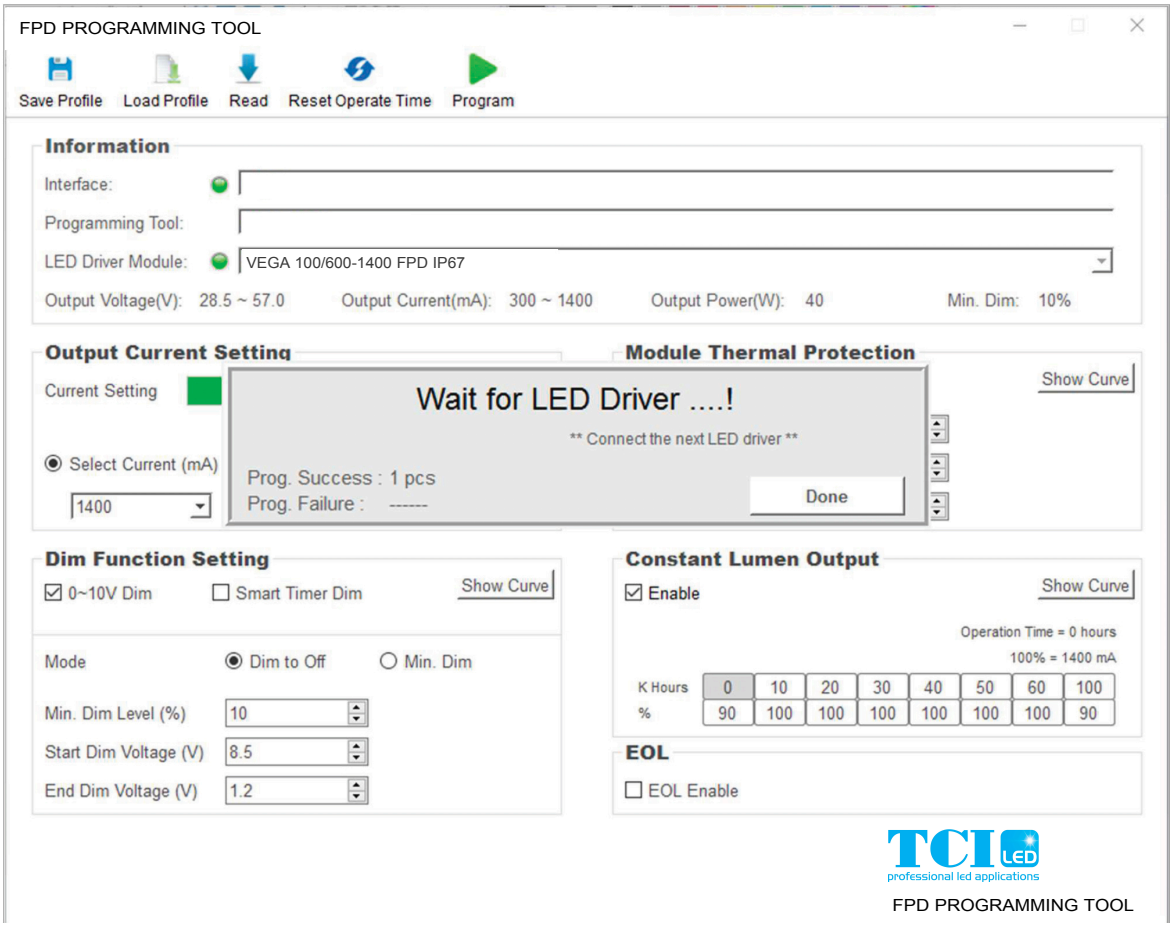


When the programming is completed, the message “Programmed successfully….!” or “Programmed Failed….!” will be displayed on the programming view, and automatically count the number of “Prog. Success” or ”Prog. Failure”.





If the LED driver is not connected, the programming view will display the message “Wait for LED Driver....!”. At this time, you can connect the next LED driver to continue programming, or click the "Done" button to close the programming view.



Function 5:

Read and check

The Read function will help the user to read the parameters/profile of the LED driver and use the information.

When the LED driver is connected, click the "Read" button will start reading.