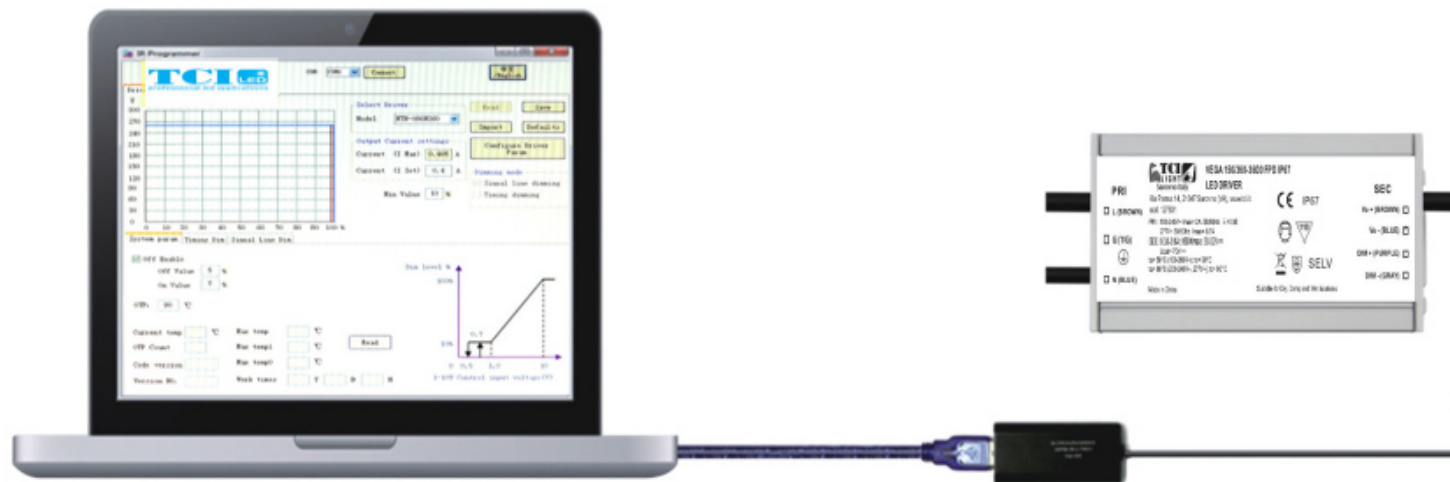


Programming Procedure For VEGA FPD LED Drivers

Programming Setup

VEGA drivers use dimming wire + TCI dedicated software + programmer to program outputs and multi-functions.

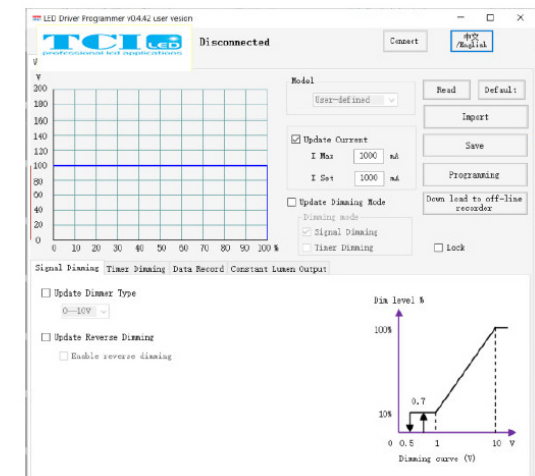
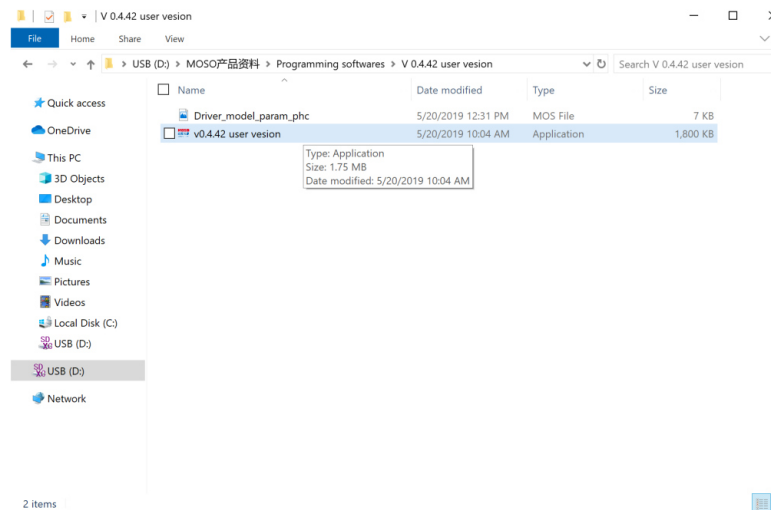
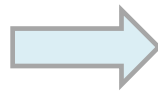
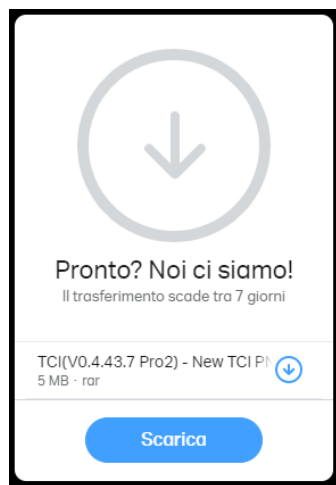


Please prepare:

- Computer with Windows system, 32bit or 64 bits are both ok.
- One of the driver that you want to program.
- Dimming Wire Programmer from TCI, model number is 127094 FPD PROGRAMMING TOOL 2.0
- Connect the dimming wires “purple & grey” of the driver, to connector of the USB programmer
- Connect the programmer to USB port of the computer.

Programming Setup

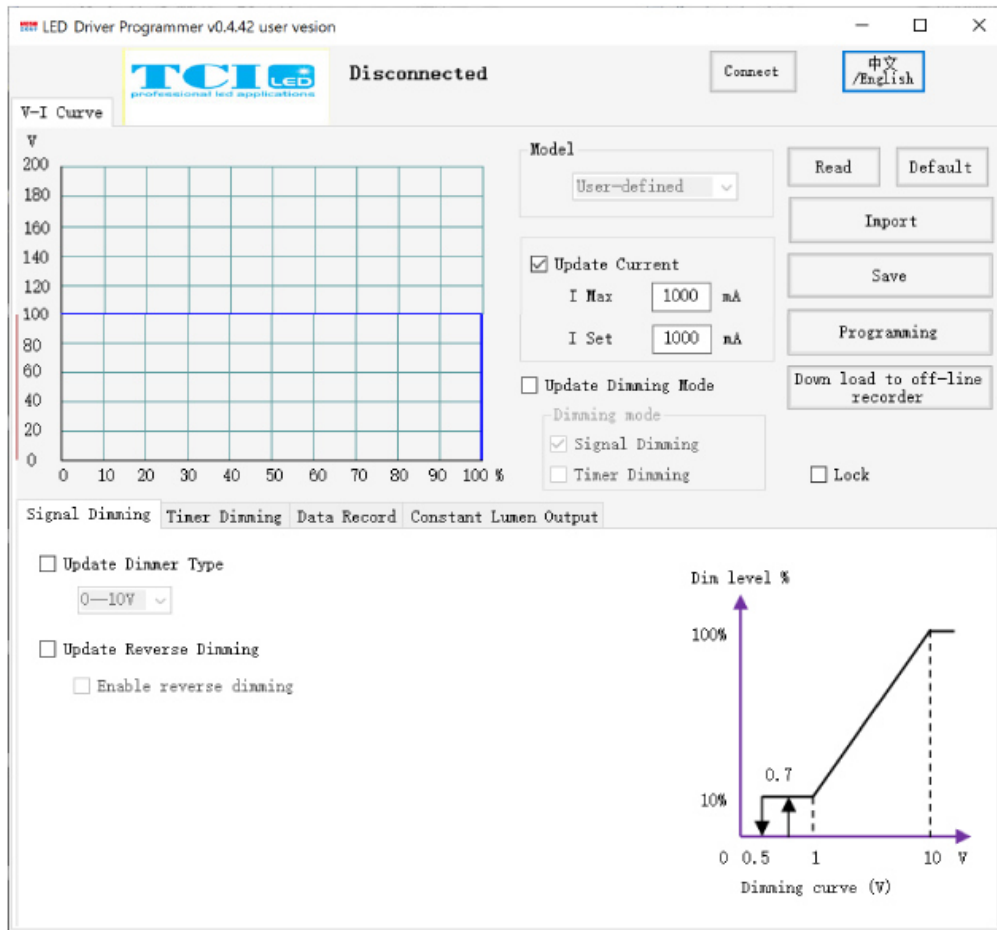
Download programming software for VEGA drivers to your computer.
Unzip the software file, click and run.



Notice:

- If the driver is not connected with computer, when you click and run the software, it pop up a notice “ can not find the port”. It reminds you to connect the driver to start program.

Programming- Set Iout



Procedure:

- Click “English” to switch to English interface.
- Click “Connect”, the software will read the model number of the driver by itself.
- A message pop up “ The software found a new model which is different from historical record, do you want to change to the new model?” Click YES.
- When the model number shows in the software, it means the connection is successful. Otherwise you need to check if the connection is something wrong.

Programming- Set Iout

One driver has wide range of outputs, so client can change Iout freely, within the operating range stated in datasheet.

Take VEGA 150/1800-3600 FPD IP67 for example, you can use different Iout and Vout to reach same power.

Vo:42V, Io:3.60A, 150W

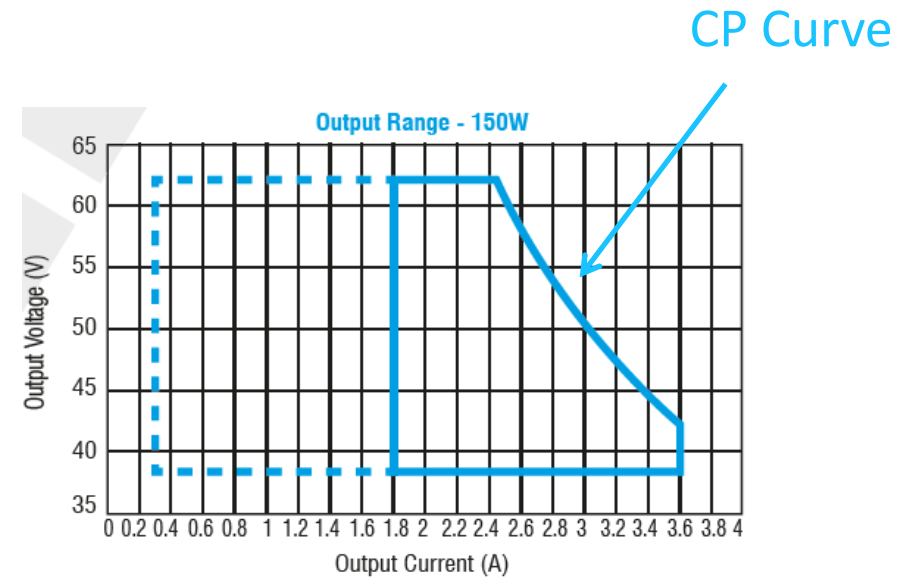
Vo:48V, Io:3.13A, 150W

Vo:54V, Io:2.78A, 150W

Vo:56V, Io:2.68A, 150W

Vo:62V, Io:2.42A, 150W

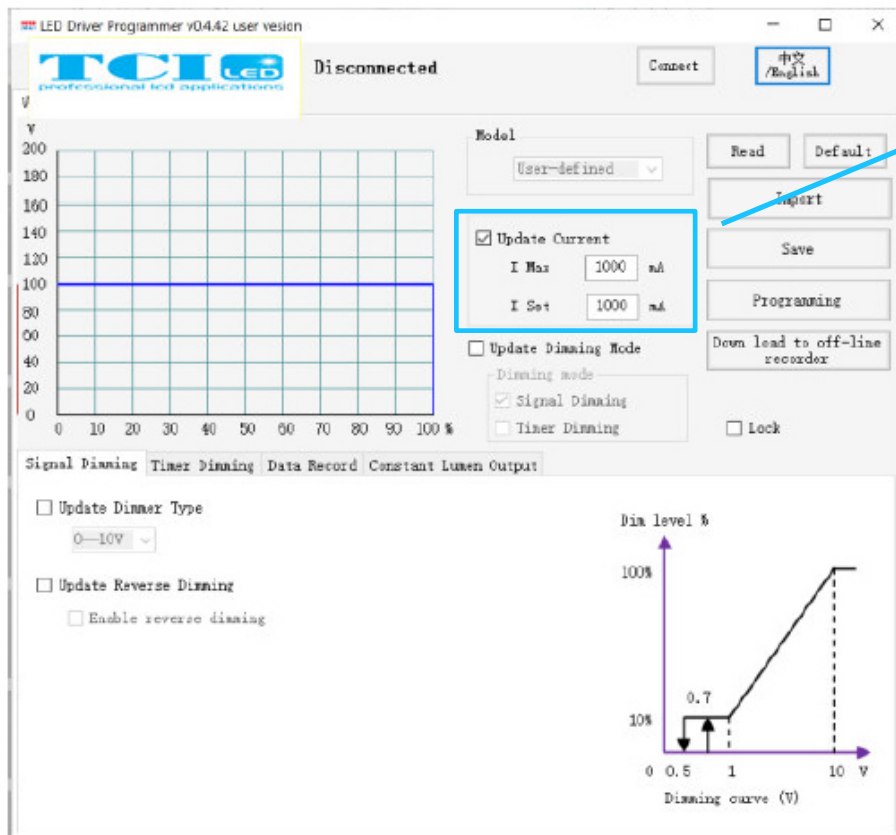
VEGA 150/1800-3600 FPD IP67



Calculate what is the Iout values you need, to power your LED light fixture.

Make sure the Iout and Vout you use is within the operation range of such driver, otherwise the light fixture couldn't be powered on properly when the Vout is over-low, or start protection mode, when the Vout / Iout is beyond the operation range.

Programming- Set Iout



☒ Set Current

I Max: 1050 mA

I Set: 700 mA

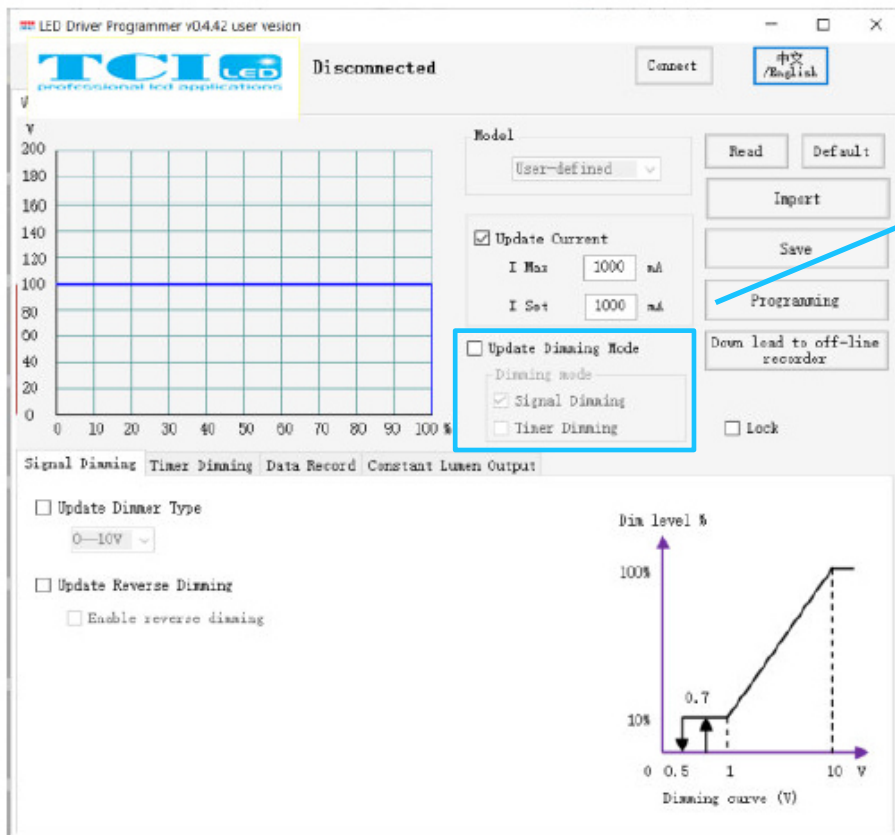
Procedure:

I_{max} is fixed depends on the driver design, customer cannot change it.

I_{set} should be defined based on customer's needs. Click "Programming".

Once I_{set} is configured, there is a red line shows percentage of loading, so customer can refer to datasheet to find corresponding efficiency, THD, etc.

Programming- Set Dimming



☒ Update Dimming Mode

Dimming mode

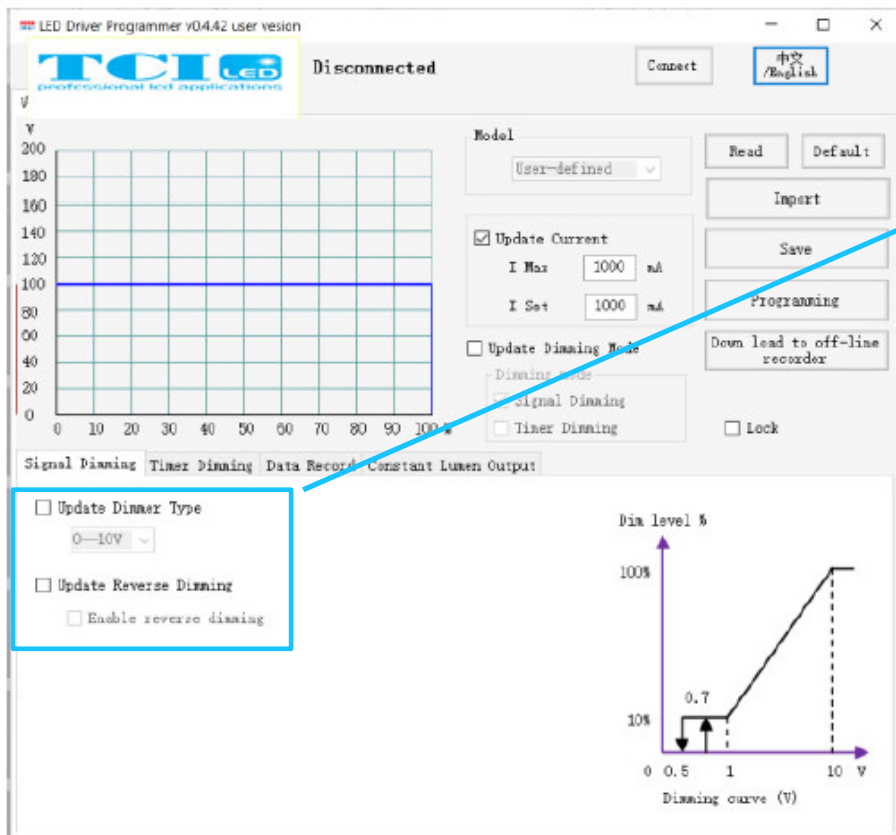
☐ Dimming

☒ Timing Dimming

Procedure:

- If you want to use any dimming mode, select "Update Dimming Mode".
- If you use a 0~5V/10V or PWM dimming system or dimmer, select "Signal Dimming".
- If you want to set a internal timer dimming schedule, select "Timer Dimming".

Programming- Set Dimming



☒ Update Dimmer Type

☒ Update Dimmer Type

0-10V

0-10V

0-9V

0-5V

0-3.3V

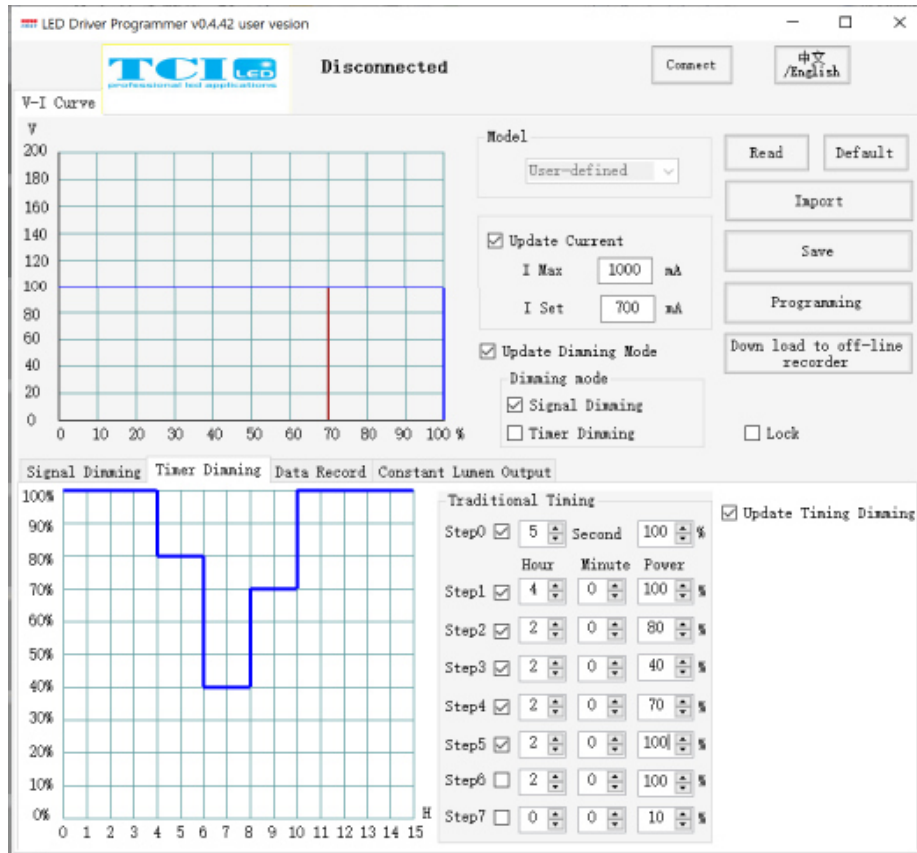
☒ Update Reverse Dimming

☐ Enable reverse dimming

Procedure:

- The default setting is 0~10V dimming mode.
- Customer can change to 0~9V / 0~5V / 0~3.3V as well.
- Customer can select “reverse dimming” for some applications, for example, tunnel lighting projects usually use reverse dimming.

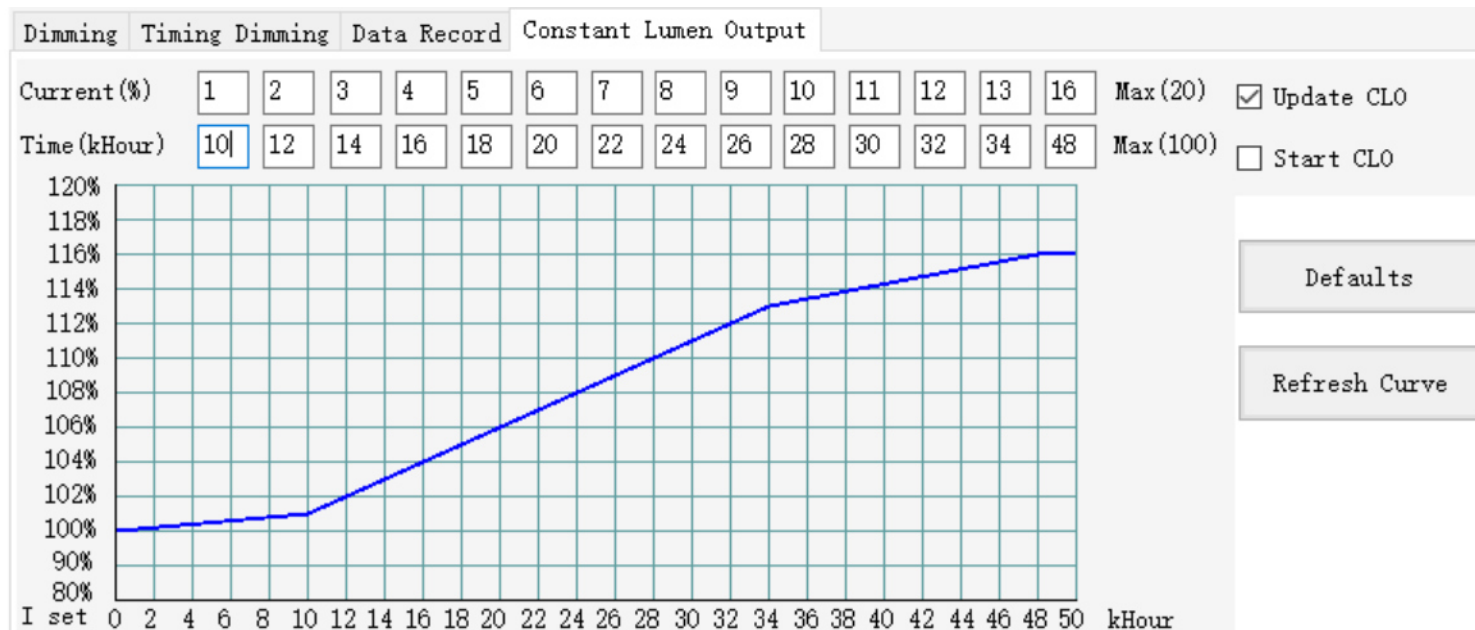
Programming- Set Timer Dimming



Procedure:

- If customer would like to set auto-dim schedules in night, select "Update Timing Dimming"
- Define dimming schedule in "Traditional Dimming"
- Once the timer dimming schedule is configured, every time once the driver is power on it will start to calculate the hours and run the dimming schedule.

Programming- Set CLO



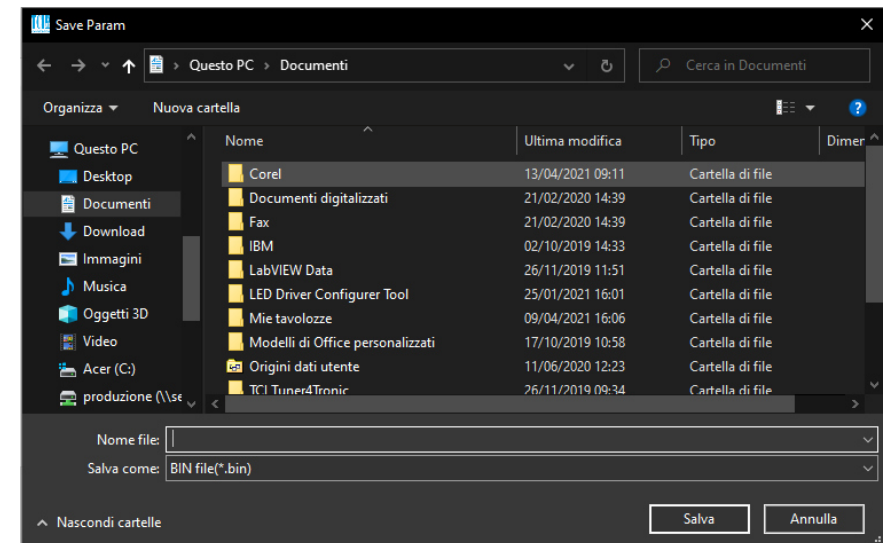
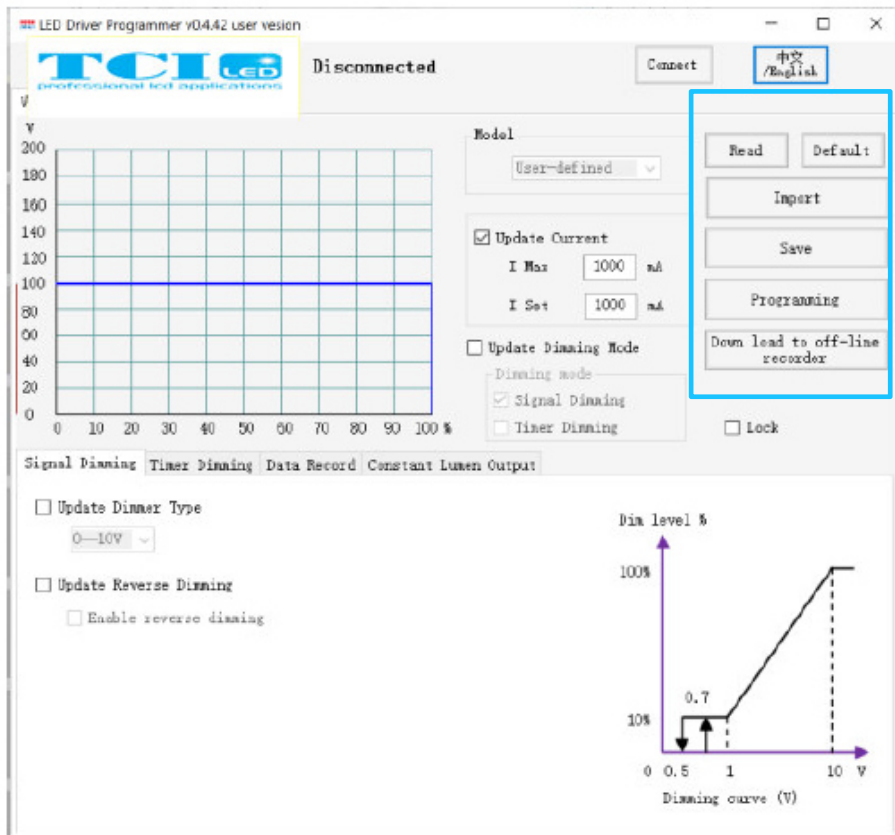
Procedure:

- Refer to LEDs datasheet and calculate light decay within lifespan, and consider lumen maintenance factor, customer can define CLO function.
- Use less lout when the light fixture is new and high efficient, increase lout little by little over the lifespan, to compensate the light loss and maintain same lumen output over the life circle.

Batch Programming

Procedure:

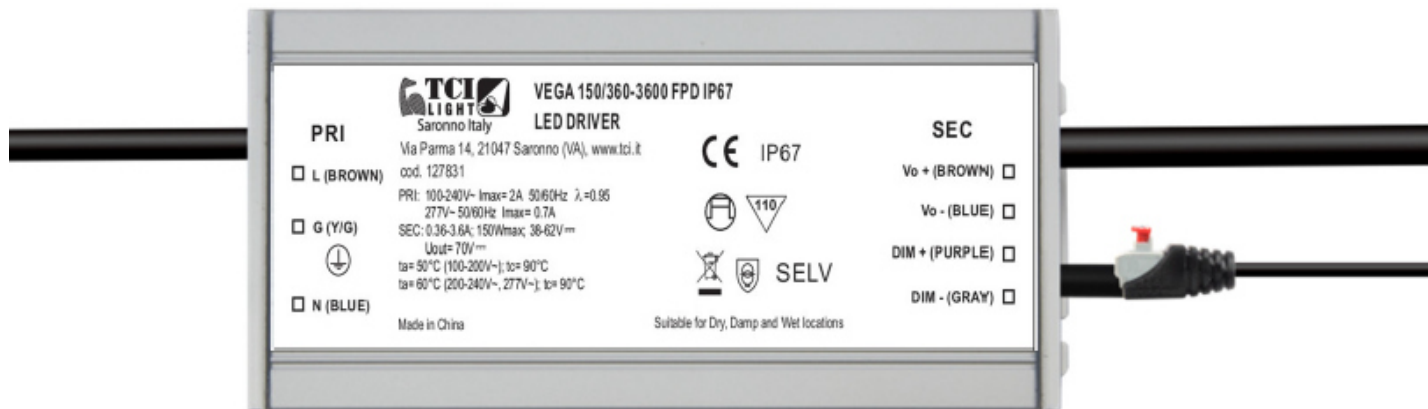
- After all above settings was done, click “Save” to saving your setting of this driver to your computer, in case you want to save the record, or for future tracking, or reuse...
- Or “Download to off-line recorder”



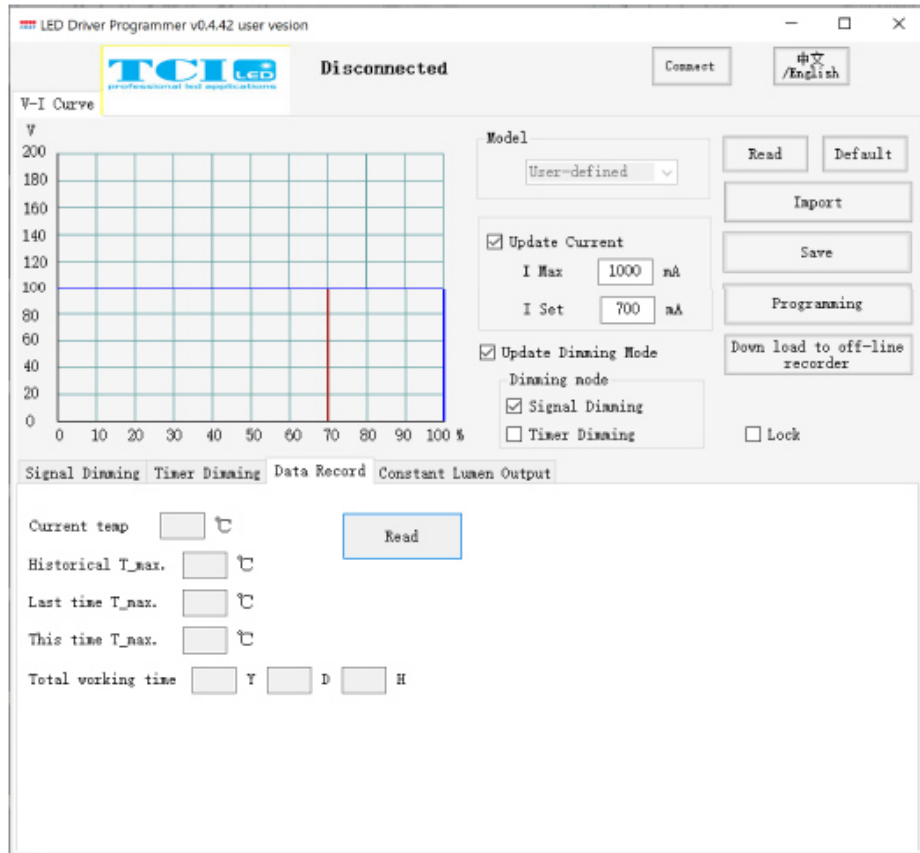
Batch/Field Programming

Procedure:

- Client can save all above programming setting to an off-line recorder, and use the recorder for batch programming, or re-configure on field.



Programming- Black Box Function



Reading and record operation conditions of the driver

Procedure:

- This function is used when a engineer develop a fixture and check if the driver works properly with the cooling and LED modules, or when the driver is defective.
- Connect the divers to programmer and computer as same as how to program it.
- Click “Read” to know total operated hours of the driver, to check if it’s within warranty, and how many working hours per day.
- To read highest key components temperatures in history, and real time component temperatures, to diagnose driver failures.



For additional details please send an email to
info.tech@tci.it