

Quick Guide for Programmable Driver Configuration with NFC Digital Wand

Attention:

Please note that for certain ThoroLED programmable drivers, you must use the TPSB-100AW NFC Digital Wand to program.

Compatible LED Drivers

LED Driver Part#	LED Driver Description	Programming Tool
T1M1UNV098P-50L	50W, 330mA-980mA	TPSB-100AW
T1M1UNV134P-75L	75W, 450mA-1340mA	TPSB-100AW
T1M1UNV140P-40C	40W, 470mA-1400mA	TPSB-100AW

Software installation

Required:

- Microsoft .NET Framework 4.0 runtime
- FTDI D2xx Driver CDM v2.12.24 or above
- ProgramDriverConfig (LPL) v1.3.3 (20181224A).msi
- Locate the installer named "ProgramDriverConfig (LPL) v1.3.3 (20181224A)" and double-click to run. The default install directory is C:\Program Files(x86)\LPL\. The software installation may be interrupted by Windows Defender Smart Screen. If this happens, press the icon "More info" and then "Run anyway" to skip the checking.





Programmable Driver Configuration v1.3.3	
Parameters Production	Dimming Curve Output Operating Window Print Preview
Output Parameters Pmax (W): 50.0 Vmax (V): 56.0 Imax (mA): 2000 Output Level	2000 - (2000mA) 1800 - (2000mA)
Min (%): 1 Dimming Curve: Max (mA): 2000 Linear	
V-DIM Input Voltage Min (Vdc): 1.0 • Off Voltage 0.8 • Max (Vdc): 9.0 • DIM-to-OFF Enabled \overrightarrow{V} Thermal Foldback Foldback Temperature (°C): 90 •	E 1200 - E 1200 -
Connect Read Wand Write Wand Read Tag	🧉 🖬 🗙

3. Double click to open the program, the main interface is as below:

Connection:

- i. Connect the "NFC Digital Wand" to computer by "Micro-USB" cable.
- ii. Press "<u>connect</u>" button to start the program. If the program is successful connecting the wand, the button will change to <u>connected</u>, while the wand will display CONN as connected status. Otherwise, it will not change, please check for USB connection.





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4. Data Configuration

- i. The following parameters can be configured by user:
 - Minimum output current percentage (1, 3, 5, 7, 10)
 - Maximum output current
 - Dimming Curve (Linear, Log, Inverse Log, Square-law)
 - Minimum dimming voltage (1, 1.5, 2.0)
 - Maximum dimming voltage (7.0, 8.0, 9.0)
 - Off Voltage (0.8, 1.0, 1.2)
 - DIM-to-OFF feature
 - Thermal Foldback Temperature (75, 80, 85, 90) °C
- ii. Press "Read Wand" button for getting the configured data from the wand. Once the data is successfully read from the wand, below message box will be shown:



iii. Press "Write Wand" button for loading the configurations into the wand. Once the data is successfully written to the wand, below message box will be shown:



5. Read NFC Driver (Tag)

- i. Put the wand near the NFC antenna of the driver. The position of "NFC here" on the wand should be placed on the antenna of the driver.
- ii. To read the configured data of the tag, press "Read Tag" button and then the "Waiting dialogue" will be shown.



iii. Once the driver is detected by the wand, the message box will be showing "Tag checked".





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	Electrical rating of driver	Dimmi	ing behavior	Output voltage	t current and behavior	d Print	out sticker
	Programmable Driver Configuration v 1.3.3						- 🗆 X
	Parameters Production	Di	mming Curve	Output Operati	ng Window	Print Preview	N
	NFC Digital Wand		2000-				
	Output Parameters Pmax (W): 50.0 Vmax (V): Imax (mA): 1400	56.0	1800-				
Output current	Output Level		1600-				
aimming ievei	Min (%): 1 Dimming Curve Max (mA): 2000 Linear	•	1400				
Output voltage 🗕	V-DIM Input Voltage		<u>₹</u> 1200				
level	Min (Vdc): 1.0 ~ Off Voltage (Vde	:): 0.8 ~	- 1000				
Select thermal	Max (Vdc): 9.0 V DIM-to-OFF Ena	bled 🗹	1000-				
temperature to	Thermal Foldback		ā 800-			/	
program	Foldback Temperature (°C): 90	/	600 -				
			-		/		
			400 -				
			200 -				
	d		0				····
Shows the driver status	No Driver Detected		0	1	2	34 n	5 6 7 8 9 10
							mining voltage (v)
	Connected Read Driver Write Driver						් 🖬 🗙
	Status between Read the Program t	he					Load/Save
	computer data driver	<u> </u>					Configuration Data

6. Programmable Software Features Summary

7. Data Configuration

i. To save the configuration data in the computer, press "Save" button and then enter the name of the data-set



Enter the Name of data-set

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ii. To load the configuration data from the computer, press "Load" and then select the name of the data-set

6	<u> </u>
"Load" Button	

List of Data	×
M1P1033R2000L112 M1P1050R2000	
OK	Cancel

Select data-set to load



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8. Data Configuration

- i. If the wand is connected to the computer's program, press yellow "Connected" button to disconnect the wand from the program. The wand is still powered by the USB.
- ii. The digital wand can be selected running on two modes:
 - · Easy Mode: Set maximum output current only
 - Advanced Mode: Program all available parameters
- iii. To select the wand operates under "Easy mode", the toggle switch should be selected as upward; to select the wand operate under "Advanced mode", the toggle switch should be selected as downward;
- iv. For "Easy mode", the controlling method is just as same as the ordinary version of NFC digital wand.
- v. For "Advanced Mode", press "Read" button on the wand to set the wand to "Ready State".
 - The wand will NOT load the data to the driver.
- vi. Press "Write" button on the wand to set the wand to "Program mode".
 - The wand will load the data into the driver while the position "NFC here" placed near the antenna of the driver.
 - 2 beep sound means data is successfully loaded into the driver.
 - 5 beep sound means data can NOT be loaded into the driver.
 - Single beep sound means the wand detects the driver with the same configuration data.





Ready State Of Advanced Mode



Program State Of Advanced Mode