

## About this document

This document provides information about the compatibility and configuration of TRIDONIC drivers with dimming products like 0-10V dimmers, switches and dimming control systems.

## Technical background

The two most common dimming curve types are linear dimming and logarithmic dimming.

















In order to create a dimming experience that is pleasant for the human eye, two things have to be considered:

1. The used components (dimmers and drivers) must be set to match each other.
2. The sensitivity of the human eye and its influence on the perceived dimming curve has to be considered.

The general guideline is this:

- \_ When using a driver with a linear dimming curve then the dimmer should have a logarithmic dimming curve and vice versa.

The following table shows how the different combinations of dimmer, driver and human eye interact:

Dimming curve type of dimmer		Dimming curve type of driver		Sensitivity of human eye	=>	Perceived dimming curve	=>	Result
 linear	+	 logarithmic	+		=>	 linear	=>	Good result
 logarithmic	+	 linear	+		=>	 linear	=>	Good result
 linear	+	 linear	+		=>	 logarithmic	=>	Bad result
 logarithmic	+	 logarithmic	+		=>	 logarithmic	=>	Bad result

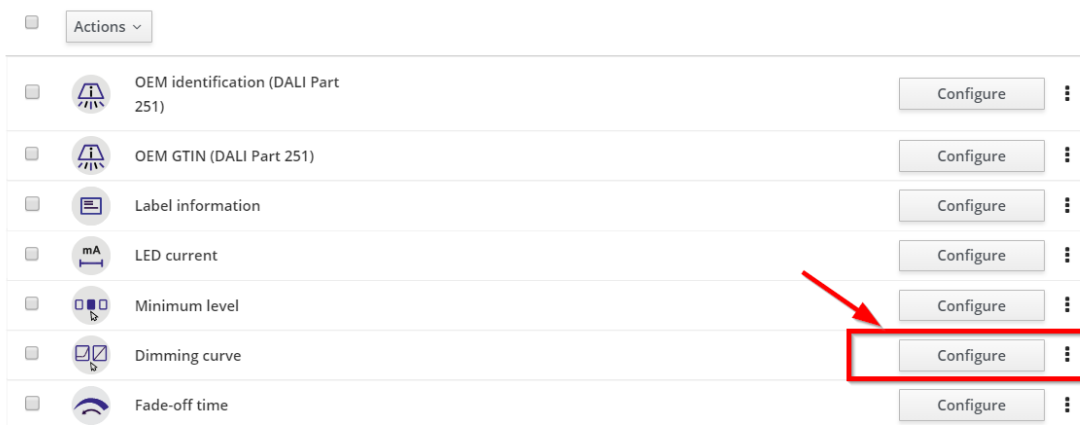
## Driver configuration in TRIDONIC companion suite

According to the above explanation, the recommended procedure is as follows:

- \_ Find out about the dimming curve of your dimmer.
- \_ Configure your driver accordingly as explained above:  
Select the dimming curve (linear or logarithmic) that matches the used dimmer.

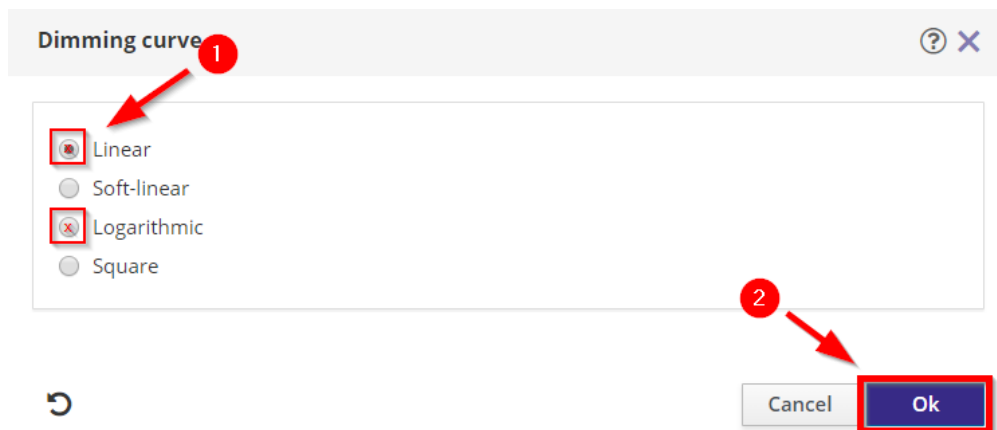
Configuring the dimming curve of a driver can be done in the web based deviceGENERATOR tool which is part of the TRIDONIC companionSUITE:

- \_ Open <https://devicegenerator.tridonic.com>.
- \_ Activate the checkbox at **Dimming curve** and click **Configure**.




Depending on the specific LED Driver, the deviceGENERATOR displays a number of supported dimming curve types. In the example below it is linear, soft-linear, logarithmic and square.

- \_ Select **Linear** or **Logarithmic** and click **Ok**.



Further information about the TRIDONIC companionSUITE and its software tools can be found on the TRIDONIC homepage at <https://www.tridonic.com/com/en/products/companionsuite.asp>.

Further information about every function of the deviceGENERATOR can be found inside the function by clicking the help symbol .

