

## How to add dimming functionality to a solar lighting system

**VE.Direct TX digital output cable ASS030550500** (previously called PWM light dimming cable)

**To be used together with the MPPT 75/10, 75/15 or 100/15.**

This cable is intended for solar lighting applications (more applications may follow later).

Energy consumption can be substantially reduced by light-dimming when appropriate.

Lower energy consumption will reduce overall system cost, and increase light availability even when the battery has only been partly charged due to bad weather.

The TX cable connects the TX pin on the VE.Direct connector of a MPPT 75/15 or 100/15 to the PWM light dimming input of a LED driver.

The MPPT solar charge controller must have software version V1.15 or higher. A MPPT with an older version can be upgraded with VE Power Setup. The software can be downloaded from our website.

<http://www.victronenergy.com/feeds/ve-power-setup/windows/VEPowerSetupInstaller.exe>

The latest firmware can be requested from [service@victronenergy.com](mailto:service@victronenergy.com)

A VE.Direct to USB interface (ASS030530000) is needed to connect to the MPPT controller to the computer.

To configure the MPPT controller, download 'mpptprefs':

[http://www.victronenergy.com/Executables/mppt\\_vedirect\\_tools/mpptprefs.zip](http://www.victronenergy.com/Executables/mppt_vedirect_tools/mpptprefs.zip)

Please see: <http://www.victronenergy.com/live/ve.direct:mpptprefs> for the programming options.

The dimming function has been tested with the following LED drivers:

- RECOM RBD-12
- Glacial Power GP-LD7048-0B
- Glacial Power GP-LD3548-0B
- MEAN WELL LDH-45

