

FAQ status PIDbox Mini (V1.2)

1 PURPOSE OF PIDBOX MINI

The PIDbox Mini of iLumen increases the yield of your solar panels and extends their lifetime. The device is installed between the solar panels and the inverter. At night, when the solar panels are not active, the PID affected solar cells are regenerated.



2 DESCRIPTION PIDBOX MINI



- 1. Ground connection with the frame of the solar panels DC-connection with PV-installation
- 2. Connection power supply
- 3. Statuslamp (LED)

3 STANDARD OPERATION

When the iLumen PIDbox Mini is hooked up correctly to the inverter you will see the following status LED readouts.

- ✓ RED BLINKING: power supply connected but no active solar system detected
- ✓ **BLUE:** active solar system detected but no current flowing
- ✓ CYAN: active solar system detected and current flowing
- ✓ GREEN BLINKING: all startup conditions are met and PIDbox mini will start in less than 30 minutes
- \checkmark **RED:**PIDbox mini active at <u>night</u> time. Regeneration takes place.
- ✓ RED BREATHING (only for FW version V.7.4.3 or higher, readable on rating plate on rear of PIDbox Mini): PIDbox mini active at <u>night</u> time. Regeneration takes place. The speed of breathing depends on the amount of degradation (PID).
- ✓ **PURPLE:** (OUTDOOR only) purple led can burn at <u>night</u> time. May switch to **RED**
- ✓ YELLOW: (only for FW version V.7.4.2 or higher, readable on rating plate on rear of PIDbox Mini): PIDbox Mini active at <u>night</u> time at slower pace than <u>RED</u> status. Regeneration takes place.

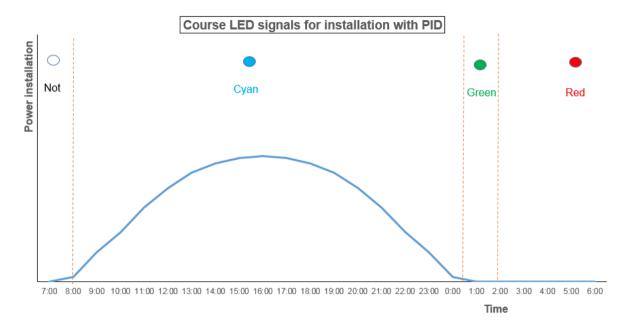
If the LED does not light up at night, this does not necessary imply a problem. The RED LED will only light up if specific environmental conditions permit. During the day, the LED should always light up.

The difference between the <u>red blinking</u> and <u>red breathing</u> LED signal and other LED signals is clarified on the <u>Youtube channel</u> of iLumen.

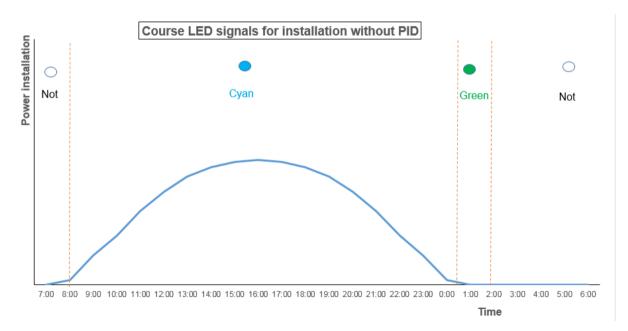


The charts below show the status of the LED in function of time (day/night)

Installation with PID (time is indicative)



Installation without PID (time is indicative)





4 TROUBLESHOOTING

LED readout	Fault	Corrective action
No leds visible	Product does not work	Make sure the DC-power supply is plugged into a AC-outlet. Also make sure the outlet is under tension.
No leds visible	Product does work and makes some clicking noises	This can happen at dusk and dawn. LED should light up after a while. If not please contact iLumen technical service.
Led gives other color than BLUE, GREEN, WHITE, CYAN, PURPLE or RED	Product does not work	Please contact iLumen technical service.
No RED or PURPLE led during nighttime while during the day blue led is burning	Curing of the panels is not working	 This can have 2 reasons: PID is not present on PV-modules (however the first night of regeneration the led must be on). Earth connection between PIDboxMini and the frame of the modules is interrupted
Red led blinking during the night	Product does not work	If you connected the PIDbox when it was already dark outside, the PIDbox will not become active during that 1 st night. Normally the PIDboxMini should work the nights after that when the solar plant has been active during the day.

5 CONTACT

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In this document, a number of practical key issues concerning the operation of the PIDbox Mini are discussed. For more comprehensive information about the PIDbox Mini, we refer to the official manual of this product.