

Impulse		
Series:	Impulse 2.0	
Description on display:	Cause:	Solution:
PO	You are currently in the technicians setup mode.	Press down on the on/off button for 3 seconds to leave this mode.
6	Under voltage protection has been activated.	Please contact your e-bike specialist.
7	Over voltage protection has been activated.	
8th	The hall sensor is defective.	
9	The motor winding is defective.	
21	The speed sensor is defective.	Check for pinched, broken and short-circuited cable connections.
23	The lighting is defective.	
30	Communication between display, motor and battery is defective.	Remove the battery and check all cable connections. Clean all connections with a dry cloth.
All segments are visible, charging status indicator is flashing.	The battery is overcharged.	Please contact your e-bike specialist.
All display segments are dark, the charging status indicator is flashing.	The battery is empty.	Recharge the battery.
Series:	Impulse 2.0 Seat Tube Battery	
Description on display:	Cause:	Solution:
5 LEDs flashing quickly.	The battery is empty and turned off.	Recharge the battery. The battery will turn itself off and can be used again after a brief standby period. Remove the charger from the power supply immediately. If an error has occurred, the charger must be replaced.
	The battery is overloaded.	
The 1st LED is flashing quickly.	A charging error has occurred.	
Series:	Impulse 1.0 Battery	
Description on display:	Cause:	Solution:
No speed sensor signal/SPEED.	The spoke magnet slipped.	The magnet should be no more than 5 mm away from the sensor on the chainstay.
	Speed sensor defective.	Please contact your e-bike dealer.
	Cable connection is defective.	Please contact your e-bike dealer.
	Wrong spoke magnet.	Mount the correct magnet.
Battery communication error.	Motor unable to connect with battery.	Connect the battery to a charger. Change the battery. Please contact your e-bike specialist.
Motor temperature too high.	Operating temperatures reached are too high after long steep slopes that are climbed in a higher gear.	Let the motor cool before you continue your journey.
Battery temperature is too high.	The operating temperature of the battery is too high.	Ride without motor support for a while. Place the battery back in the charger for 1 minute.
Battery temperature too low.	The operating temperature of the battery is too low after riding in the winter.	Keep the battery in a warm room.
Pedal.	Defective coaster brake.	Replace the drive unit.
Series:	Impulse 1.0 Battery	

Description:	Cause:	Solution:
3 LEDs flashing	If 3 LEDs are flashing after you've turned on the system, there may be a battery communication error.	Restart the system. 1. If the problem persists, briefly put the battery back in its charger so the BMS can correct the error. 2. Use another battery or contact your e-bike dealer.
If the left LED flashes rapidly, followed by all LEDs flashing slowly, there are 3 possible causes.	The spoke magnet has slipped.	Check the spoke magnet. The distance to the sensor on the chainstay must be 5mm or less.
	Speed sensor is defective.	Please contact your e-bike dealer.
	Cable connection is defective.	Please contact your e-bike dealer.
Only when pulling up: the left LED flashes slowly, followed by all LEDs flashing quickly.	The safety test for the pedal position "back-up brake" or "drive" is still running or not recognized.	Move the pedals back and forth until you feel resistance again.
		When the flashing stops, you can ride with pedal assistance.
		If the flashing continues, you can only ride without pedal assistance.
Series:	Impulse 1.0 Battery	
Description:	Cause:	Solution:
Impulse error code 999	Software error.	Restart the system. Please contact the service.
Kalkhoff error code 606	External battery error that does not affect the battery itself.	Bent contacts.
		Display USB connection defective.
		Battery short circuit due to overload.
		Defective release point under the bracket.
		PowUnity GPS Bike Trax theft protection activates the error.
Impulse error code C005	Software version is displayed when switching off.	There is no error.
Impulse 2.0 error code C004	Internal display error or control unit contact issue. Motor stages cannot be selected.	Replacing the control unit and display.
Series:	Problem solving	
Description:	Cause:	Solution:
While charging, battery temperature exceeds 45°C.	High ambient temperatures.	Interrupt the charging procedure and let the battery cool down. Then recharge the battery in a cooler space. If the problem persists, please contact your e-bike specialist. The battery may need to be replaced.
	Damaged battery.	Do not recharge or use damaged batteries. Please contact your e-bike specialist. The battery may need to be replaced.
Battery cannot be recharged.	Ambient temperature too high or too low.	You can charge the battery at temperatures between 0°C and 45°C.
The battery is damaged.	Either there's been an accident, a fall with the bicycle, or the battery has been dropped.	Do not recharge or use damaged batteries. Please contact your e-bike specialist. The battery may need to be replaced.
Battery action radius appears low.	Battery cell capacity depends on the temperature.	Protect the battery from heat, for example by parking your bicycle in the shade.
"No speed sensor signal"/"SPEED"	The spoke magnet has moved.	Check whether the spoke magnet has moved. The magnet should be at the shortest possible distance to the sensor on the chainstay (5 mm max.).
	Speed sensor defective.	Visit your e-bike specialist.
	Cable connection is defective.	Visit your e-bike specialist.
		Change the battery.

"Battery communication error"	"Motor unable to connect to battery"	Visit your e-bike specialist.
"Motor temperature too high"	The operating temperature reached by the motor is too high. This may occur after riding up a long, steep hill in a higher gear.	Let the motor cool down. When the motor has cooled, you can continue your journey.
Constant display of "PEDAL"	Defective coaster brake.	Visit your e-bike specialist.