

VEHICLE DEFAULTS CODE

1. Default identification :

The internal Status LED to the vehicle is visible on the components protection cover. It always provides a direct code of fault. When the vehicle operates normally - without fault present- the Status LED is off. If the calculator detects a fault, a code with 2 digits (2 flashes) appears until the fault is corrected.

For example, the code “3,2” is “High temperature alarm on the motor” appears as follows:

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On Mega Diag 4.0 monitoring screen you can directly read the number of the possible vehicle fault in progress (defect “32” in the preceding example) and also the last 10 registered vehicle faults.

2. First check:

Once you identified default, take care of always checking in if the fuses operate, if the electrical harness is in good condition and if the electric connections are correct.



3. Status led codes description:



<i>LED Code :</i>	<i>description :</i>
Led off : ■	Vehicle OK
From 1,2 to 6,1	See troubleshooting chart for detailed explanations



NB: The calculator indicates only one fault at a time.



4. Troubleshooting chart:


Refer to this table for suggestions covering a wide range of possible defaults:


Code	Description	Fault cause
1-1 (11)	Low voltage alarm on Battery row 1 (0-12V)	One of the main battery row voltage is less than 10.5V: 1. Empty or damaged battery 2. Wiring issue on main 48V network 3. Connection issue between batteries and electric components plate
 	<u>Symptom :</u> <ul style="list-style-type: none"> Common fault indicator ON ECO light ON 	


Code	Description	Fault cause
1-2 (12)	Low voltage alarm on Battery row 2 (12-24V)	One of the main battery row voltage is less than 10.5V: 1. Empty or damaged battery 2. Wiring issue on main 48V network 3. Connection issue between batteries and electric components plate
 	<u>Symptom :</u> <ul style="list-style-type: none"> Common fault indicator ON ECO light ON 	


Code	Description	Fault cause
1-3 (13)	Low voltage alarm on Battery row 3 (24-36V)	One of the main battery row voltage is less than 10.5V: 1. Empty or damaged battery 2. Wiring issue on main 48V network 3. Connection issue between batteries and electric components plate
 	<u>Symptom :</u> <ul style="list-style-type: none"> Common fault indicator ON ECO light ON 	


Code	Description	Fault cause
1-4 (14)	Low voltage alarm on Battery row 4 (36-48V)	One of the main battery row voltage is less than 10.5V: 1. Empty or damaged battery 2. Wiring issue on main 48V network 3. Connection issue between batteries and electric components plate
 	<u>Symptom :</u> <ul style="list-style-type: none"> Common fault indicator ON ECO light ON 	


Code	Description	Fault cause
2-1 (21)	High voltage alarm on Battery row 1 (0-12V)	One of the main battery row voltage is over 19.5V: 1. Faulty charging unit 2. Wiring issue on main 48V network 3. Connection issue between batteries and electric components plate
	<u>Symptom :</u> • Common fault indicator ON	


Code	Description	Fault cause
2-2 (22)	High voltage alarm on Battery row 2 (12-24V)	One of the main battery row voltage is over 19.5V: 1. Faulty charging unit 2. Wiring issue on main 48V network 3. Connection issue between batteries and electric components plate
	<u>Symptom :</u> • Common fault indicator ON	



Code	Description	Fault cause
2-3 (23)	High voltage alarm on Battery row 3 (24-36V)	One of the main battery row voltage is over 19.5V: 1. Faulty charging unit 2. Wiring issue on main 48V network 3. Connection issue between batteries and electric components plate
	<u>Symptom :</u> • Common fault indicator ON	



Code	Description	Fault cause
2-4 (24)	High voltage alarm on Battery row 4 (36-48V)	One of the main battery row voltage is over 19.5V: 1. Faulty charging unit 2. Wiring issue on main 48V network 3. Connection issue between batteries and electric components plate
	<u>Symptom :</u> <ul style="list-style-type: none"> Common fault indicator ON 	



Code	Description	Fault cause
3-1 (31)	High temperature alarm on main battery pack	1. The vehicle has been used in a too intensive manner 2. Damaged or too old battery 3. The vehicle has been stored in a too warm area
	<u>Symptom :</u> <ul style="list-style-type: none"> Common fault indicator ON 	



Code	Description	Fault cause
3-2 (32)	High temperature alarm on the motor	1. The vehicle has been used in a too intensive manner 2. Air cooling turbine is faulty (fuse or turbine itself) 3. motor collectors are faulty 4. Vehicle is over-loaded 5. blocked turbine inlet filter 6. Front wheel parallelism is not good (abnormal power losses) 7. Transmission issue (abnormal power losses)
	<u>Symptom :</u> <ul style="list-style-type: none"> Common fault indicator ON 	



Code	Description	Fault cause
3-3 (33)	Low voltage alarm on 12V accessories battery	Battery voltage is less than 11.5V: 1. Heavy duty 12V auxiliary 2. "48/12" DC/DC converter Fuse faulty 3. DC/DC converter fuse faulty. 4. 12V accessories battery is faulty
	<u>Symptom :</u> <ul style="list-style-type: none"> Accessories battery indicator is ON 	


Code	Description	Fault cause
3-4 (34)	Voltage measurement fault	1. One of the main battery row voltage is less than 0.5V or over 19.5
 	<u>Symptom :</u> <ul style="list-style-type: none"> Common fault indicator ON ECO light ON if <0.5V 	


Code	Description	Fault cause
4-1 (41)	Low voltage alarm on Battery row 1 (0-12V)	One of the main battery row voltage is less than 2V: 1. Empty or damaged battery 2. Wiring issue on main 48V network 3. Connection issue between batteries and electric components plate
 	<u>Symptom :</u> <ul style="list-style-type: none"> Common fault indicator ON ECO light ON 	



Code	Description	Fault cause
4-2 (42)	Low voltage alarm on Battery row 2 (12-24V)	One of the main battery row voltage is less than 2V: 1. Empty or damaged battery 2. Wiring issue on main 48V network 3. Connection issue between batteries and electric components plate
 	<u>Symptom :</u> <ul style="list-style-type: none"> Common fault indicator ON ECO light ON 	


Code	Description	Fault cause
4-3 (43)	Low voltage alarm on Battery row 3 (24-36V)	One of the main battery row voltage is less than 2V: 1. Empty or damaged battery 2. Wiring issue on main 48V network 3. Connection issue between batteries and electric components plate
 	<u>Symptom :</u> <ul style="list-style-type: none"> Common fault indicator ON ECO light ON 	

Code	Description	Fault cause
4-4 (44)	Low voltage alarm on Battery row 4 (36-48V)	One of the main battery row voltage is less than 2V: 1. Empty or damaged battery 2. Wiring issue on main 48V network 3. Connection issue between batteries and electric components plate
 	<u>Symptom :</u> <ul style="list-style-type: none"> Common fault indicator ON ECO light ON 	

Code	Description	Fault cause
5-1 (51)	Charger driver fault	1. Wiring issue between calculator and charger. 2. Faulty calculator 3. Faulty charger
	<u>Symptom :</u> <ul style="list-style-type: none"> Common fault indicator ON Autonomous charge carried out by the charger 	

Code	Description	Fault cause
5-2 (52)	Current measure fault	During charge, the difference between the estimated current and the measured currents is more than 20A : 1. Calibration issue on current probe 2. Faulty current probe 3. Faulty calculator 4. Faulty charger
	<u>Symptom :</u> <ul style="list-style-type: none"> Common fault indicator ON Charge is stopped 	

Code	Description	Fault cause
5-3 (53)	Battery charge finished due to timeout error	Charging Phase 1 > 570mn or Charging phase 2+3+4 >540mn 1. Battery was too empty when charge has been started 2. Battery is worn
 	<u>Symptom :</u> <ul style="list-style-type: none"> Common fault indicator ON Charge indicator flickers very quickly Charge is stopped 	

Code	Description	Fault cause
5-4 (54)	High temperature charger alarm	The air cooling of the charger is not efficient 1. Charger ventilators are faulty 2. the Air intake / Exhaust through the charger is blocked
	<u>Symptom :</u> <ul style="list-style-type: none"> Common fault indicator ON Charge is stopped 	

Code	Description	Fault cause
6-1 (61)	Communication error with motor controller	1. Wiring issue on the electric components plate between J21 (speed controller) and J12 (calculator) 2. Controller is damaged 3. Calculator is damaged
	<u>Symptom :</u>	