

Commando

Flash Code	Fault Type	Suggested Actions
1	Commando Fault	Try reprogramming the Commando
2	Accessory Fault	Check all accessory devices connected to the Commando Check program is suitable for particular variant
3	Left Motor Fault	Check the left motor, connections and cabling
4	Right Motor fault	Check the right motor, connections and cabling
5	Park Brake Fault	Check the left park brake, connections and cabling
6	Unused	---
7	Low Battery Fault	Check Battery voltage is above 17V Check Battery Connection and Terminals Check Condition of Batteries
8	Over Voltage Fault	Check Battery voltage is below 32V Check Battery wiring and terminating is secure
9	DX Bus Fault 1 (DX version only)	Check condition of DX-BUS Cables and Connectors
	Internal Fault (Non DX versions)	Contact Service Agent
10	DX Bus Fault 2 (DX version only)	Check condition of DX-BUS Cables and Connectors Check Hazards were not turned on at Power Up
	Internal Fault (Non DX Versions)	Contact Service Agent
11	Stall Timeout Fault	Ensure motors are free to turn and Power off and on.

DX

Flash Code	Fault Type	Suggested Actions
1	DX Module Code	If the unit has just been reprogramming this may not indicate a fault. Turn system on and off to clear flash code or check program is correct. If this does not cure the fault: Check DX-BUS Connectors and Cables Check status LED's on other modules Check all necessary modules are present and connected
2	DX Accessory Code	A Clam or Tam receiving a Slow/Stop signal, if not may cause this: Check all external devices connected to the System excluding devices connected to DX Power Module.
3	M1 Motor Fault	Check the M1 (normally left) motor, connections and cabling
4	M2 Motor fault	Check the M2 (normally right) motor, connections and cabling
5	Left Park Brake Fault	Check the Left Park Brake, connections and cabling
6	Right Park Brake Fault	Check the Right Park Brake, connections and cabling
7	Low Battery Fault	Check Battery voltage is above 17V Check Battery Connection and Terminals Check Condition of Batteries
8	Over Voltage Fault	Check Battery voltage is below 32V Check Battery wiring and terminating is secure
9	CAN L Fault	Check condition of DX-BUS Cables and Connectors
10	CAN H Fault	Check condition of DX-BUS Cables and Connectors Check Hazards were not turned on at Power Up
11	Stall Timeout Fault	Ensure motors are free to turn and Power off and on.
12	Module Mismatch	There is a module or software incompatibility issue. Reprogram or Consult your Dynamic Service Centre

Dynamic

Diagnostic Flash Code Listings

Shark

Description	This means.....	Notes
All LED`s off	Power is off	-
All LED`s on steady	Power is on	Less LED`s imply a reduced battery charge
Left RED LED is flashing	Battery charge is low	Charge batteries ASAP
Right to left "chase"	SHARK is being brought out of lock mode	To unlock SHARK press the horn twice within 10 seconds of turning on.
Left to right "chase" alternating with steady display	SHARK is programming, inhibit and/or charging mode	The steady LED indicatethe current state of battery charge
Right green LED is flashing	Shark is in speed limit mode	the current state of battery chargewill be displayed at the same time
All LED`s flashing slowly	Shark has noticed an out of neutral at power up (oonapu) condition	Release the joystick back to neutral
All LED`s flashing quickly	Shark has detected a fault	Shark uses flash codes to indicate a fault, see the diagnostic section below
2 flashing amber LED`s	A communication fault exists between the power module and remote	Check the power module for a fault, the cable for damage, and that the battery is sufficiently charged

Flash Code	Fault Type	Suggested Actions
1	User Fault	Possible stall timeout or user error Release the joystick to neutral and try again
2	Battery Fault	Check the batteries and cabling Try changing the batteries Batteries may require replacing
3	M1 Motor Fault	Check the M1 (normally left) motor, connections and cabling
4	M2 Motor fault	Check the M2 (normally right) motor, connections and cabling
5	Left Park Brake Fault	Check the left park brake, connections and cabling
6	Right Park Brake Fault	Check the right park brake, connections and cabling
7	SHARK Control unit fault	Internal Controller unit Fault, Replace Control unit
8	SHARK Power Module Fault	Check SHARK Connections and Wiring Replace the Power Module
9	SHARK Communications Fault	Check SHARK Connections and Wiring Replace the SHARK Control Unit
10	Unknown Fault	Check all Connections and Wiring Consult a service agent
11	Incompatible Control Unit	Wrong type of Control Unit connected Ensure the branding of the Power Module matches that of the Control Unit

DL FLASH CODES

Flash Code	Fault Type	Suggested Actions
1	Low Battery Fault	Check Battery voltage is above 17V Check Battery Connection and Terminals Check Condition of Batteries
2	High Voltage Fault	Check Battery voltage is below 32V Check Battery wiring and terminating is secure
3	Left Motor Fault	Check the left motor, connections and cabling
4	Right Motor fault	Check the right motor, connections and cabling
5	Park Brake Fault	Check the left park brake, connections and cabling
6	Controller fault	Contact Service Agent Note: In some cases a motor fault that occurs whilst driving may cause a 6 flash fault to be registered.
7	Motor Stalled of Joystick out of Neutral at Power Up	Ensure joystick is released at power up. Ensure motors are free to turn and Power off and on.

SHARK FLASH CODES

Flash Code	Meaning	Possible Reasons and Solutions
1	Thermal Overload	The motor current has been at the maximum value too long. *The motors may not be strong enough for choosen route,(the route is too steep). *The wheels may be rubbing on the frame. *The motor may be faulty. The controller overheats. *Turn the chair off and let it cool down.
2	Battery Voltage	Battery voltage too low. *Check the battery cables. *Charge the batteries. Batteries are overcharge. *If driving downhill, slow down and turn on the lights, if equipped.
3 4	Left Motor Right Motor	The motor is not connected or a short circuit in the motor wiring. *Check the motor connections. *Check the motor brushes
5 6	Left Brake Right Brake	The brake has been manually released. *Engage the brake, turn the chair off and back on. The brake is not connected or there is a short circuit in the brake connection. *Check that the brake cables are not loose or damage.
7	Joystick	The joystick is not connected. *Check that the joystick cable is connected or not damaged. *Replace the joystick.
8	Controller	Check that the controller cables are connected or not damaged. *Replace controller if cables are good.
9	Communication Error	The controller has a communication error. *Batteries may be completely discharged, charge the batteries. *Check that the controller cables are connected or not damaged. *Replace the controller.
10	Unknown Fault	Check that all cables are connected or not damaged.
11	Incompatibility Fault	Mismatched joystick and controller.

While the power is ON, press and hold the Power button for 4 seconds. The display will turn off immediately. After 4 seconds all LED's will flash briefly and the horn will sound a short beep. The powerchair will then turn off.

