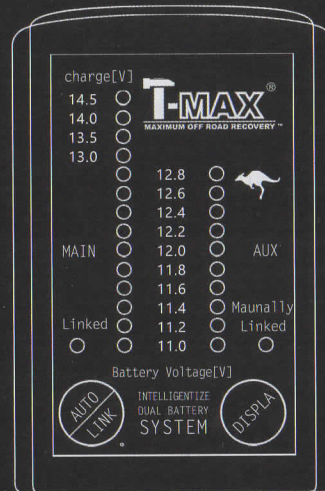




新双电池系统

Dual Battery System

DBS02



Warning

- 1: The product is only applicable to the monitoring of lead-acid battery.
- 2: The monitor display of this product is only suitable for installation in the vehicle cab.

General functions

The battery monitor has been designed for the dual battery management system. The monitor can display the stored energy of both batteries and the charging voltage by a solar panel or any other source. The batteries are automatically linked or isolated, for charging or discharging. In emergency situations a manual operation function to link the batteries.

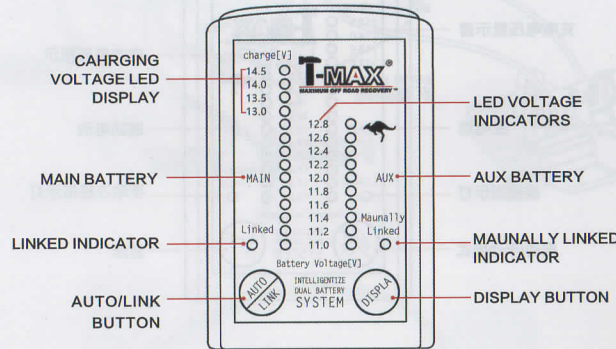
Application

- Commercial trucks and 4WDs
- 4WDs / Expedition Vehicles
- Yachting , Mobil homes

Specification

Working voltage:	8..16V
System voltage:	12V
Measuring range:	8..16V
Display range (battery voltage):	11.0V..12.8V
Display range (battery charging voltage):	13.0V..14.5V
Accuracy:	+/-2%
Consumption (stand by):	<0.5mA
Consumption max. Display active (45S) :	62mA
Isolator switch-on threshold:	1--0.3A
Solenoid continuous load current:	250A
Operating temperature:	-20°C..+60°C
Dimension:	103x21x66mm
Sealing standard version:	IP40

THE MAIN FUNCTIONS OF THE MONITOR DISPLAY



AUTO/LINK BUTTON

AUTO/LINK is a dual-function button, and the automatic mode and manual mode can be switched between each other.

DISPLAY BUTTON

The voltage of each battery is visible for 45 sec after pushing the display button.

LINKED INDICATO

When the solenoid is connected to work, the LINKED indicator is on.

MAUNALLY LINKED

Manually Linked indicator is on, indicating that the manual mode is running.

LED INDICATORS

Green: The batteries are in the safe working range.

Yellow: the battery power is low; it is recommended to charge it.

Red: The battery power is too low, need to be charged immediately.

Turn off all load switches, these indicators correspond to the battery capacity.

12.6V =100%

12.4V=75%

12.2V=50%

12.0V=25%

DISPLAY OF CAHRGING VOLTAGE LED DISPLAY

Red light: >14.5V: The batteries will be overcharged (Voltage is too high), damage to batteries may occur

Yellow light: >14.0V: Standard battery charging mode

Green light: <14.0V: Save charging mode, no damage to batteries

Warning: When the LED flashing, it indicates the Main battery voltage is not enough or the Dual Battery System is out to order. Please check the Main battery voltage or check the Dual Battery System connection to avoid battery is damaged.

AUTOMATIC/MANUAL BATTERY LINK

AUTOMATIC BATTERY LINK

While the engine is running, the main and aux batteries are automatically connected by connecting solenoid and charged in parallel (green led linked is on). If the engine is stopped, the two batteries will be disconnected automatically with some delay. Appliances as fridges, lights, compressors, inverters are now safe to use the aux battery.

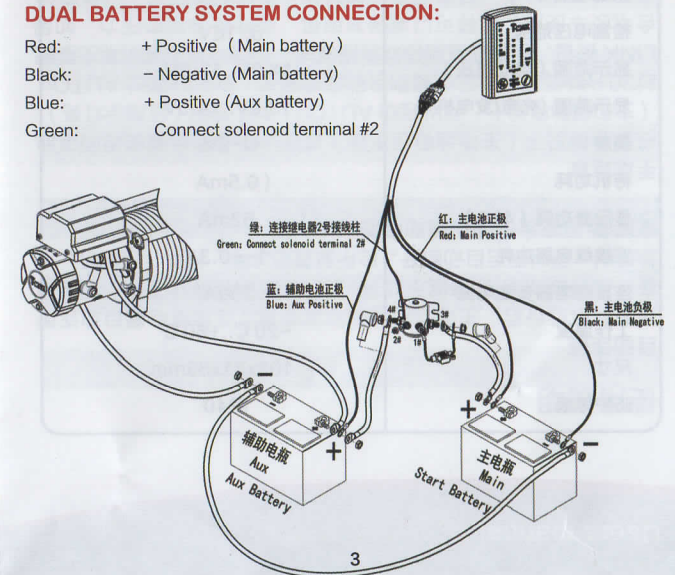
MANUAL BATTERY LINK

In an emergency (defective or empty Main Battery) or the higher power consumption of two batteries (Main/Aux), can be connected by activating the link button AUTO/LINK (red LED manually linked is on). The system will return to the Automatic mode in 30 minutes automatically or by operating AUTO/LINK button. When using the winch, the load sharing function with the manual battery link reduces the stress on alternator, wiring and the batteries. If high power consumption is needed from both batteries for long time, actuate the AUTO/LINK button again, the system returns to automatic mode (red LED manually linked is off) than press AUTO/LINK button within 6 seconds to preventing from batteries separation. The system will AUTO RESET after approx. 30 minutes.

WINCH APPLICATION AND WIRING DIAGRAM

DUAL BATTERY SYSTEM CONNECTION:

- Red: + Positive (Main battery)
- Black: - Negative (Main battery)
- Blue: + Positive (Aux battery)
- Green: Connect solenoid terminal #2

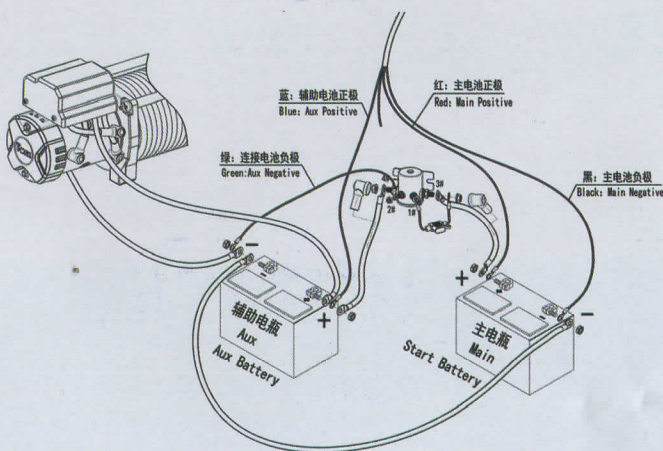
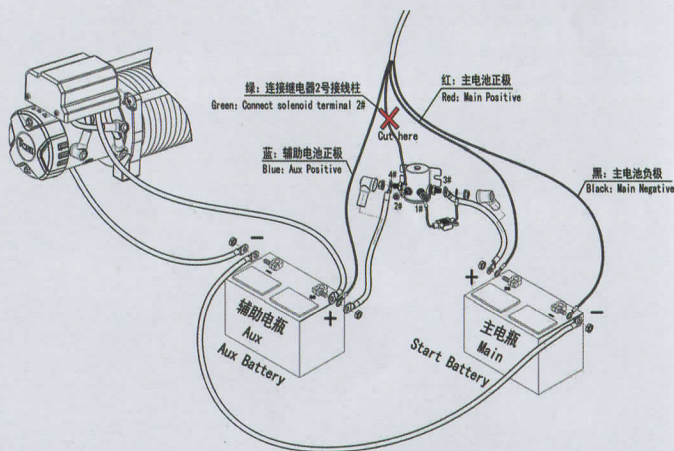


EMERGENCY INSTRUCTIONS

In case the dual battery system damage by fire, welding spikes, salt water, vehicle crash etc., the following instructions show how to link the two batteries.

1. Cut the green wire leading to the solenoid (terminal #2).
2. The one end of the green wire still connected the solenoid (terminal #2). Connect the other end of the green wire to the negative of one of the batteries or earth. You will hear the solenoid "clack" when the batteries link.

NOTE: The batteries will not disconnect automatically by AUTO/LINK button once solenoid is connected to the negative terminal or earth by green wire.



TROUBLESHOOTING

LINKED INDICATOR

While the engine is running, linked indicator is flashing, indicates that the solenoid is faulty or not working, check the solenoid or the wire connection or the fuse.

While the engine is off, linked indicator is flashing, indicates that the monitor display is faulty, and the monitor display should be replaced in time.

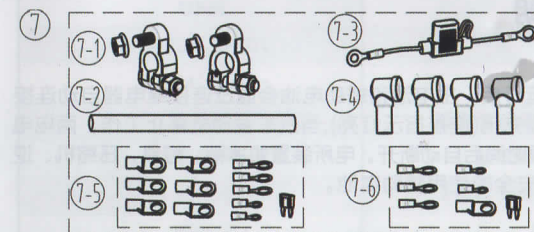
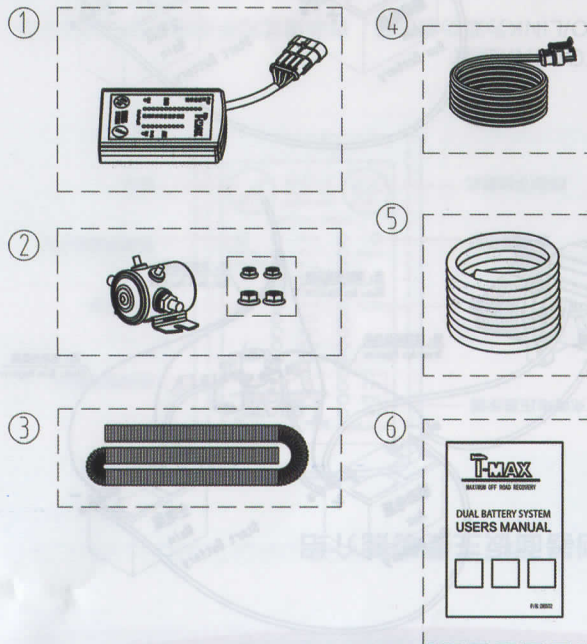
THE CHARGING VOLTAGE DISPLAY FLASHING

Which is caused by the red wire is disconnected to the monitor display, or the system voltage exceeds 16V due to other reasons, please check the wire connection immediately.

THE BATTERY VOLTAGE DISPLAY FLASHING

After pressing the display button, if the main voltage display flashing or the auxiliary battery flashing, it indicates that the battery voltage is too low or battery failure, please check the battery.

Packing List



		U-fuse 2A	2	24V	
		RV125-5 Connector	2	Green 2 pcs	
		RV125-6 Connector	2	Black 2 pcs	
		RV125-8 Connector	6	2 each of red, black and blue	
		SC16-8 Connector	7		
7		7329105.6.1-20	XRC4 Curve sheath	4	
		DBS02.6	Dual battery fuse base assembly	1	one end US-5, the other end US-4
			Ø12x200 Heat shrink tube	1	Black
		GB/T 6177.1-2000	Hex Flange Nuts M8	2	
		DBS02.4	Car battery clip	2	one positive and one negative
6	P/N:DBS02	Instruction	1		
5	DBS02.5	6AWG Black power cable	1		
4	DBS02.2	Cable	1		
3		Ø15.8 Siphon bellows	4.8m		
		GB/T 6177.1-2000	Hex Flange Nuts M8	2	
2		GB/T 6177.1-2000	Hex Flange Nuts M6	2	
		12V/200A	Solenoid	1	
1	DBS02.1	Monitor Display	1		
Item No.	Part No.	Description	Quantity	Remark	

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