E937 24AMP BATTERY CHARGER 24V – 24V
26V Turn On

24V – 24V BATTERY CHARGER 24AMP
HIGH SPECIFICATION
MANUFACTURED IN THE UK



FRONT VIEW



REAR VIEW

- **PART NO: E937**
- **TYPE: SWITCH MODE BATTERY CHARGER**
- **Maximum Output (Charging) Current: 24A (PVin = 26V)**
- **Output Voltage (V-out): 28.0V ± 0.1V**
- **Power Input Voltage (PVin): 18V to 28V**
- **Control Input Voltage (CVin): Charger Enabled: >26.5V**
  Charger Disabled: <25.5V
- **Hysteresis: 1V**
- **Control Input Current: 50µA**
- **Battery Current Drain: 250µA (Charger Disabled)**
- **Overload Protection: Yes**
- **Thermal shutdown: Yes**
- **Polarity Protection: External Fuses Input = 30A / Output = 30A**
- **Connections: Red = Positive Input**
  Black = Negative Input, Output
  Blue = Positive Output
  Yellow = Positive Control
- **Physical Dimensions: 285 x 100 x 75mm**
- **Mountings: 4 x Ø 5.5mm Holes**
- **Construction: Anodised Cooling Profile**

MODELS ALSO AVAILABLE: 12AMP / 36AMP / 48AMP / 60AMP / 72AMP

WHY NOT VISIT OUR WEBSITES TO VIEW THE OTHER PRODUCTS WE MANUFACTURE:

http://www.battery-management-voltage-converter.com
This site covers our:
- **Battery Management Systems**
- **Split Charge Controllers**
- **DC-DC Battery Chargers**
- **DC-DC Voltage Converters**
- **Trailer Voltage Converters**
- **Battery Status Indicators**
- **Voltage Sensitive Switches.**

http://www.eurogroup-gb.com
This site covers our Range of:
- **Water Level Monitors**
- **Water Level Probes**
- **Temperature Monitors**
- **Temperature Probes**
- **Air Conditioning Fan Control Units**
- **Vehicle Flashers and Interrupters**
- **Light Control Units**
- **Oil Level Monitors**
- **Oil Level Probes**
- **Hydraulic Control Units**
- **Audible Warning Devices**
- **Reversing Alarms**
- **Timers**
- **Vehicle Safety and Security Units**
- **Digital Speed Switches**
- **Solenoid Controllers**
- **Relays, Connectors, Lamps, Switches**
- **Earth Straps**
- **Looms and Wiring Harnesses**
- **Transformer and Coil Winding**
- **Mechanical Assembly**
- **Special Purpose Electrical / Electronic Assembly**
- **Encapsulation and Formal Coating**
- **Vacuum Formed Parts**
- **Printed Circuit Board Assembly**

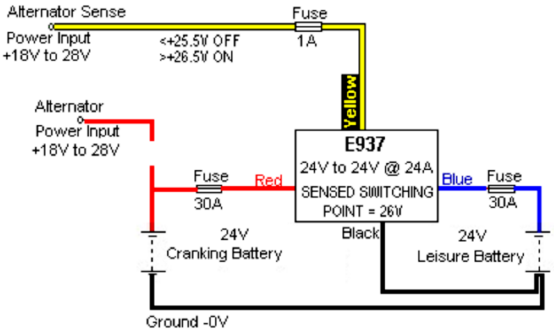
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BEFORE INSTALLATION YOU NEED TO PURCHASE:
2 X 30A AUTOMOTIVE BLADE FUSE (COLOUR: GREEN)
1 X 1A AUTOMOTIVE BLADE FUSE (COLOUR: BLACK)
3 X INLINE FUSE HOLDER (TO TAKE BLADE FUSES)

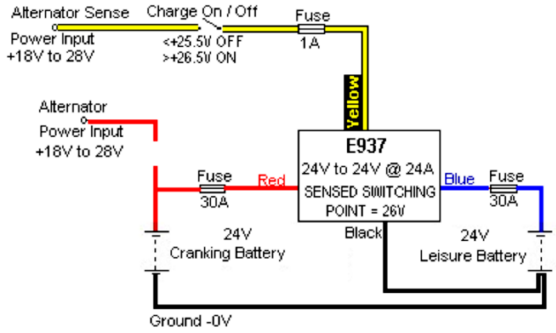
RECOMMENDED MINIMUM CABLES SIZES:
INPUT (RED): 6mm² CONDUCTOR CROSS SECTION (84/0.3mm)
OUTPUT (BLUE): 6mm² CONDUCTOR CROSS SECTION (84/0.3mm)
GROUND (BLACK): 2.5mm² CONDUCTOR CROSS SECTION (35/0.3mm)

The Charger starts when the voltage reaches approximately 26V.
This Unit = 2 X E930 12A Battery Chargers wired in parallel to form a single 24A module

Wired as a fully automatic Battery Charger
The Yellow Control Wire is wired directly to the +ve Connection of the 24V Cranking (Donor) Battery to switch the Charger on and off automatically. In this case the Control Wire senses the 24V Cranking (Donor) Battery Voltage and switches the Charger on only when the 24V Cranking (Donor) Battery is being charged.
The Unit automatically controls the maximum charge into the 24V Leisure (Recipient) Battery preventing it from becoming over-charged / damaged and prevents the 24V Cranking Battery (Donor Battery) from becoming flat / exhausted.



Wired as a manually operated Battery Charger
The Yellow Control Wire is wired via a Switch to the +ve Connection of the 24V Cranking (Donor) Battery to switch the Charger on and off manually. In this case the Operator can control when the Battery Charger is switched on or off.
If left on, the Unit will automatically control the maximum charge into the 24V Leisure (Recipient) Battery preventing it from becoming over-charged / damaged and prevent the 24V Cranking Battery (Donor Battery) from becoming flat / exhausted.



For O.E.M. Customers, Leads can be terminated to suit your requirements
This Battery Charger has been designed using a building block system to obtain the power needed to suit your requirements
This Unit can be provided with a Charging Indicator.
To request a Charging Indicator, please add an "L" to the Part Number, i.e.: E937-L

INSTALLATION INSTRUCTIONS:

1. **CONNECT A BLACK LEAD FROM THE –VE CONNECTION OF THE 24 CRANKING / DONOR BATTERY TO THE –VE CONNECTION OF THE 24V LEISURE / AUXILIARY BATTERY (COMMON NEGATIVE)**

2. **CONNECT THE BLACK TERMINAL CONNECTION FROM THE BATTERY CHARGER TO THE -VE CONNECTION OF THE 24V LEISURE / AUXILIARY BATTERY**

3. **CONNECT THE BLUE OUTPUT TERMINAL CONNECTION TO THE +VE CONNECTION OF THE 24V LEISURE / AUXILIARY BATTERY (FITTING 1 X INLINE FUSE HOLDER WITH 30A BLADE FUSE BETWEEN THE 24V BATTERY AND THE BATTERY CHARGER AS SHOWN ON WIRING DIAGRAM SUPPLIED WITH UNIT)**

4. **CONNECT THE RED INPUT TERMINAL CONNECTION TO THE +VE CONNECTION OF THE 24V CRANKING / DONOR BATTERY (FITTING 1 X INLINE FUSE HOLDER WITH 30A BLADE FUSE BETWEEN THE 24V BATTERY AND THE BATTERY CHARGER AS SHOWN ON WIRING DIAGRAM SUPPLIED WITH UNIT)**

5. **THE YELLOW CONTROL TERMINAL CONNECTION GIVES YOU THE OPTION TO SWITCH THE BATTERY CHARGER ON AND OFF USING A STANDARD LOW CURRENT SWITCH.**

6. **ALTERNATIVELY YOU CAN CONNECT THE YELLOW CONTROL TERMINAL CONNECTION TO THE +VE CONNECTION OF THE 24V CRANKING / DONOR BATTERY (FITTING 1 X INLINE FUSE HOLDER WITH 1A BLADE FUSE BETWEEN THE 24V BATTERY AND THE BATTERY CHARGER AS SHOWN ON WIRING DIAGRAM SUPPLIED WITH UNIT). THE YELLOW TERMINAL DETECTS THE VOLTAGE OF THE BATTERY AND WHEN THE BATTERY VOLTAGE FALLS BELOW 26V DC IT WILL AUTOMATICALLY SWITCH THE BATTERY CHARGER OFF UNTIL THE ALTERNATOR HAS REPLENISHED / TOPPED UP THE CRANKING / DONOR BATTERY, AT WHICH POINT THE BATTERY CHARGER WILL BE AUTOMATICALLY SWITCHED BACK ON.**

IF IN DOUBT, PLEASE CONSULT AN AUTOMOTIVE ELECTRICIAN OR TELEPHONE US ON 01939 235073