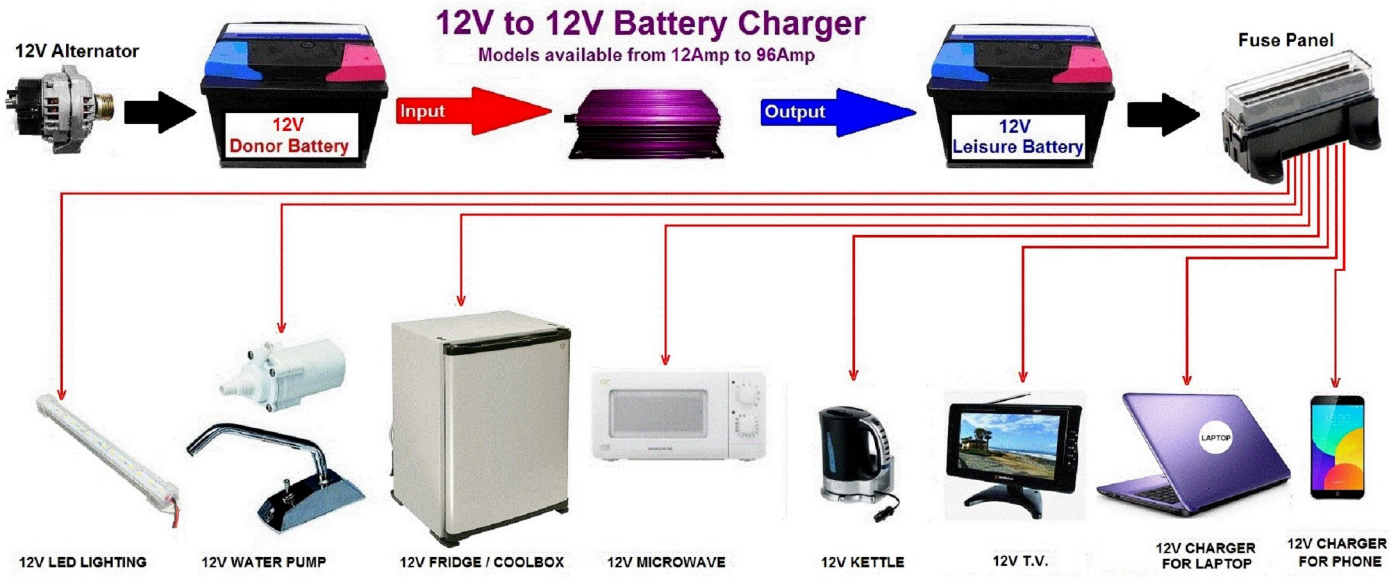
E931 12AMP BATTERY CHARGER 12V – 12V (13V Turn On)

12V – 12V BATTERY CHARGER 12AMP
HIGH SPECIFICATION
MANUFACTURED IN THE UK



- **PART NO: E931**
- **TYPE: SWITCH MODE BATTERY CHARGER**
- **Maximum Output (Charging) Current: 12A (PVin = 13V)**
- **Output Voltage (V-out): 14.0V ± 0.1V**
- **Power Input Voltage (PVin): 11V to 14V**
- **Control Input Voltage (CVin): Charger Enabled: >13.3V / Charger Disabled: <12.7V**
- **Hysteresis: 0.1V**
- **Control Input Current: 50µA**
- **Battery Current Drain: 250µA (Charger Disabled)**
- **Overload Protection: Yes**
- **Thermal shutdown: Yes**
- **Polarity Protection: External Fuses Input = 15A / Output = 15A**
- **Connections: Flying leads: Red = Positive Input**
  Black = Negative Input, Output and Control
  Blue = Positive Output
  Pink = Positive Control
- **Physical Dimensions: 215 x 71 x 55mm**
- **Mountings: 4 x Ø 5.5mm Holes**
- **Hole Centres: 198 x 40mm**
- **Weight: 618g**
- **Construction: Anodised Cooling Profile**

MODELS ALSO AVAILABLE: 24AMP / 36AMP / 48AMP / 60AMP / 72AMP / 84A / 96A



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
- Digital Speed Switches
- Horsebox Electrics

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 & Security Units
- Digital Speed Switches
- Solenoid Controllers
- Relays, Connectors, Lamps, Switches
- Earth Straps
- Looms and Wiring Harnesses

BEFORE INSTALLATION YOU NEED TO PURCHASE:

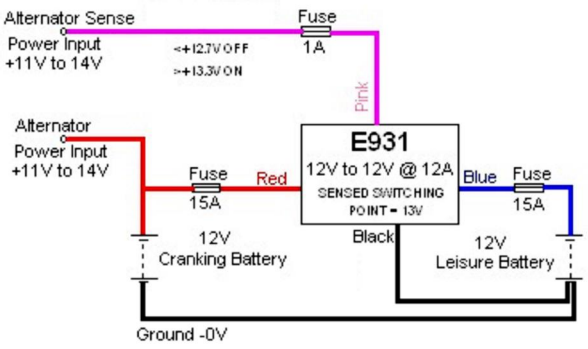
2 X 15A AUTOMOTIVE BLADE FUSE (COLOUR: BLUE)
1 X 1A AUTOMOTIVE BLADE FUSE (COLOUR: BLACK)
3 X INLINE FUSE HOLDER (TO TAKE BLADE FUSES)

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

The Charger starts when the voltage reaches approximately 13V.
This Battery Charger has been designed using a building block system to obtain the power needed to suit your requirements

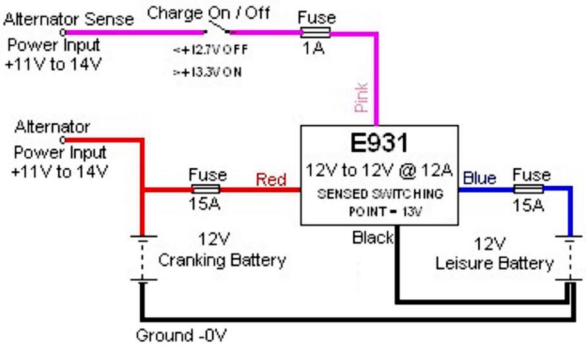
Wired as a fully automatic Charger

The Pink Control Wire is wired directly to the +ve Connection of the 12V Cranking (Donor) Battery to switch the Charger on and off automatically. In this case the Control Wire senses the 12V Cranking (Donor) Battery Voltage and switches the Charger on only when the 12V Cranking (Donor) Battery is being charged.
The Unit automatically controls the maximum charge into the 12V Leisure (Recipient) Battery preventing it from becoming over-charged / damaged and prevents the 12V Cranking Battery (Donor Battery) from becoming flat / exhausted.



Wired as a manually operated Charger

The Pink Control Wire is wired via a Switch to the +ve Connection of the 12V 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 12V Leisure (Recipient) Battery preventing it from becoming over-charged / damaged and prevent the 12V Cranking Battery (Donor Battery) from becoming flat / exhausted.



For O.E.M. Customers, Leads can be terminated 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.: E931-L

INSTALLATION INSTRUCTIONS:

1. **CONNECT A BLACK LEAD FROM THE –VE CONNECTION OF THE 12V CRANKING / DONOR BATTERY TO THE –VE CONNECTION OF THE 12V LEISURE / AUXILIARY BATTERY (COMMON NEGATIVE)**

2. **CONNECT A BLACK LEAD FROM THE BATTERY CHARGER TO THE -VE CONNECTION OF THE 12V LEISURE / AUXILIARY BATTERY**

3. **CONNECT THE BLUE OUTPUT LEAD TO THE +VE CONNECTION OF THE 12V LEISURE / AUXILIARY BATTERY (FITTING 1 X INLINE FUSE HOLDER WITH 15A BLADE FUSE BETWEEN THE 12V BATTERY AND THE BATTERY CHARGER AS SHOWN ON WIRING DIAGRAM SUPPLIED WITH UNIT)**

4. **CONNECT THE RED INPUT LEAD TO THE +VE CONNECTION OF THE 12V CRANKING / DONOR BATTERY (FITTING 1 X INLINE FUSE HOLDER WITH 15A BLADE FUSE BETWEEN THE 12V BATTERY AND THE BATTERY CHARGER AS SHOWN ON WIRING DIAGRAM SUPPLIED WITH UNIT)**

5. **THE PINK CONTROL LEAD 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 PINK LEAD TO THE +VE CONNECTION OF THE 12V CRANKING / DONOR BATTERY (FITTING 1 X INLINE FUSE HOLDER WITH 1A BLADE FUSE BETWEEN THE 12V BATTERY AND THE BATTERY CHARGER AS SHOWN ON WIRING DIAGRAM SUPPLIED WITH UNIT). THE PINK LEAD DETECTS THE VOLTAGE OF THE BATTERY AND WHEN THE BATTERY VOLTAGE FALLS BELOW APPROXIMATELY 13V 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