E1171 10AMP BATTERY CHARGER 48V – 24V

48V – 24V VOLTAGE CONVERTER 10AMP
Charge a 24V Battery from a 48V Battery System
HIGH SPECIFICATION
MANUFACTURED IN THE UK



- **PART NO: E1171**
- **TYPE: SWITCH MODE STEP DOWN BATTERY CHARGER**
- **CHARGING CURRENT: 10 AMP**
- **PEAK OUTPUT CURRENT (Vin = 48V): > 12A**
- **INPUT VOLTAGE: 36V to 60V**
- **OUTPUT VOLTAGE (Vin = 48V, I out = 0.2A): 28.1 VDC ± 0.1 V**
- **CONTROL INPUT VOLTAGE RANGE: 0V to 60V**
- **CONTROL INPUT CURRENT (V control = 60V): 7mA**
- **CONTROL INPUT VOLTAGE (CVIN) :CHARGER ENABLED > 46V / CHARGER DISABLED < 39V**
- **OVERLOAD PROTECTION: YES**
- **POLARITY PROTECTED: EXTERNAL FUSE**
- **HIGH TEMP PROTECTED: YES**
- **SHORT CIRCUIT PROTECTION: YES**
- **EFFICIENCY: 90%**
- **LOAD REGULATION: (Vin = 48V, I out = 0.2A to 15A): < 0.3V**
- **LINE REGULATION (Vin = 40V to 60V, I out = 10A): < 50mV**
- **DIMENSIONS: 215 x 71 x 55mm**
- **FIXING CENTRES: 199mm X 40mm (4 HOLE FIXING)**
- **HOLE SIZE: 5.5mm**
- **WEIGHT: 584g**
- **CONSTRUCTION: ANODISED COOLING PROFILE**

MODELS ALSO AVAILABLE: 20AMP / 30AMP / 40AMP / 50AMP / 60AMP / 70AMP / 80AMP

OEM AND TRADE ENQUIRIES WELCOME

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

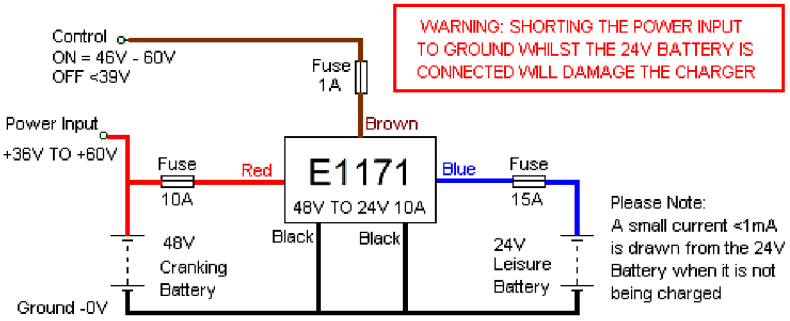
http://www.battery-management-voltage-converter.com
This site covers our:
- **Battery Management Systems**
- **Split Charge Controllers**
- **DC-DC Battery Chargers**
- **DC-DC Voltage Converters**
- **Trailer Voltage Converters**
- **Battery Status Indicators**
- **Voltage Sensitive Switches.**

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**

BEFORE INSTALLATION YOU NEED TO PURCHASE:
1 X 1A AUTOMOTIVE BLADE FUSE (COLOUR: BLACK)
1 X 10A AUTOMOTIVE BLADE FUSE (COLOUR: RED)
1 X 15A AUTOMOTIVE BLADE FUSE (COLOUR: BLUE)
3 X INLINE FUSE HOLDER (TO TAKE BLADE FUSES)

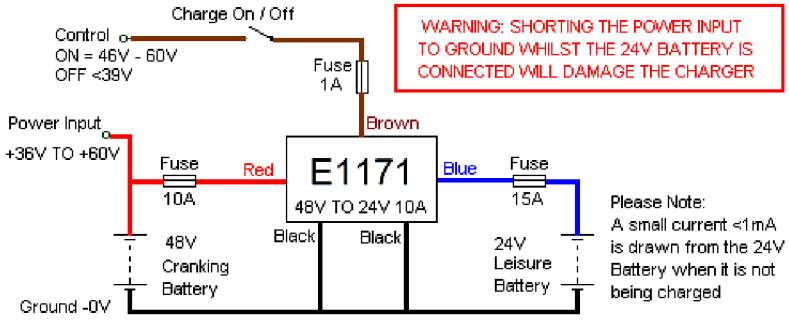
The Battery Charger can be wired in 3 ways:-

Wired as a fully automatic Charger
The Brown Control Wire is wired directly to the +ve Connection of the 48V Cranking (Donor) Battery to run the Charger all the time. *The Donor Battery should be regularly charged to prevent it becoming depleted. The Unit automatically controls the maximum charge into the 24V Leisure (Recipient) Battery preventing it from becoming over-charged / damaged.



Wired to only operate when the engine is running
The Brown Control Wire is wired to any +ve connection which becomes live when the Ignition is switched on.
The Unit automatically controls the maximum charge into the 24V Leisure (Recipient) Battery preventing it from becoming over-charged / damaged.

Wired as a manually operated Charger
The Brown Control Wire is wired via a Switch to the +ve Connection of the 48V 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.



INSTALLATION INSTRUCTIONS:

1. **CONNECT ONE BLACK LEAD TO THE –VE CONNECTION OF THE 24V BATTERY**
2. **CONNECT THE OTHER BLACK LEAD TO THE –VE CONNECTION OF THE 48V BATTERY.**
3. **ENSURE THE NEGATIVE TERMINALS OF BOTH BATTERIES ARE CONNECTED TO EACH OTHER USING A HEAVY DUTY CABLE**
4. **CONNECT THE BLUE LEAD TO THE +VE CONNECTION OF THE 24V LEISURE / AUXILIARY BATTERY (FITTING 1 X INLINE FUSE HOLDER WITH 15A BLADE FUSE BETWEEN THE 24V BATTERY AND THE BATTERY CHARGER AS SHOWN ON WIRING DIAGRAM SUPPLIED WITH UNIT)**
5. **CONNECT THE RED LEAD TO THE +VE CONNECTION OF THE 48V CRANKING BATTERY (FITTING 1 X INLINE FUSE HOLDER WITH 10A BLADE FUSE BETWEEN THE 48V BATTERY AND THE BATTERY CHARGER AS SHOWN ON WIRING DIAGRAM SUPPLIED WITH UNIT)**
6. **THE BROWN CONTROL LEAD GIVES YOU THE OPTION TO SWITCH THE BATTERY CHARGER ON AND OFF USING A STANDARD LOW CURRENT SWITCH.**
7. **ALTERNATIVELY YOU CAN CONNECT THE BROWN LEAD DIRECTLY TO THE POSITIVE INPUT, IE: THE +VE CONNECTION ON THE 48V BATTERY (FITTING 1 X INLINE FUSE HOLDER WITH 1A BLADE FUSE BETWEEN THE 48V BATTERY AND THE BATTERY CHARGER AS SHOWN ON WIRING DIAGRAM SUPPLIED WITH UNIT) WHICH WILL ENABLE YOU TO RUN THE BATTERY CHARGER ALL THE TIME***
8. **ALTERNATIVELY YOU CAN CONNECT THE BROWN LEAD DIRECTLY TO ANY +VE CONNECTION WHICH BECOMES LIVE WHEN THE IGNITION IS SWITCHED ON (FITTING 1 X INLINE FUSE HOLDER WITH 1A BLADE FUSE BETWEEN THE +VE 48V CONNECTION AND THE BATTERY CHARGER AS SHOWN ON WIRING DIAGRAM SUPPLIED WITH UNIT) WHICH WILL ENABLE YOU TO RUN THE BATTERY CHARGER ONLY WHEN THE ENGINE IS RUNNING**

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

EURO MANUFACTURING AND MARKETING LIMITED
Euro Works, 11-13 High Street, Wem, Shropshire SY4 5AA, England.
Tel: +44 (0) 1939 235073 Fax: +44 (0) 1939 235074
Email: sales@eurogroup-gb.com OR sales@battery-management-voltage-converter.com
Web Site: www.eurogroup-gb.com OR www.battery-management-voltage-converter.com