

# E788 – MOD1 40AMP BATTERY CHARGER 12V – 24V

## 12V – 24V BATTERY CHARGER 40AMP

*Charge a 24V Battery from a 12V Battery System*

HIGH SPECIFICATION

MANUFACTURED IN THE UK

This 40A Battery Charger = 4 X E720 10A Converters wired in parallel to form a single 40A module mounted on an aluminium plate.

The Charger starts when the voltage reaches >10V.

- PART NO: E788 – MOD1
- TYPE: SWITCH MODE STEP UP BATTERY CHARGER
- CHARGING CURRENT: 40 AMP
- INPUT VOLTAGE: 11 – 15V DC
- OUTPUT VOLTAGE: 28V DC
- OVERLOAD PROTECTION: EXTERNAL FUSE
- POLARITY PROTECTED: EXTERNAL FUSE
- HIGH TEMP PROTECTED: YES
- SHORT CIRCUIT PROTECTION: EXTERNAL FUSE
- EFFICIENCY: > 85%
- DIMENSIONS: 330mm X 230mm X 80mm
- HOLE SIZE: 6mm
- WEIGHT: 3058g
- CONSTRUCTION: 4 X E720 (10A) UNITS MOUNTED ON A SINGLE ALUMINUM PLATE



**MODELS ALSO AVAILABLE: 10AMP / 20AMP/ 30AMP / 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

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## **BEFORE INSTALLATION YOU NEED TO PURCHASE:**

**1 X 1A AUTOMOTIVE BLADE FUSE**

**1 X INLINE FUSE HOLDER (TO TAKE BLADE FUSES)**

## **RECOMMENDED MINIMUM CABLES SIZES:**

**INPUT (RED): 25.0mm<sup>2</sup> CONDUCTOR CROSS SECTION (196/0.40mm)**

**OUTPUT (BLUE): 25.0mm<sup>2</sup> CONDUCTOR CROSS SECTION (196/0.40mm)**

**GROUND (BLACK): 25.0mm<sup>2</sup> CONDUCTOR CROSS SECTION (196/0.40mm)**

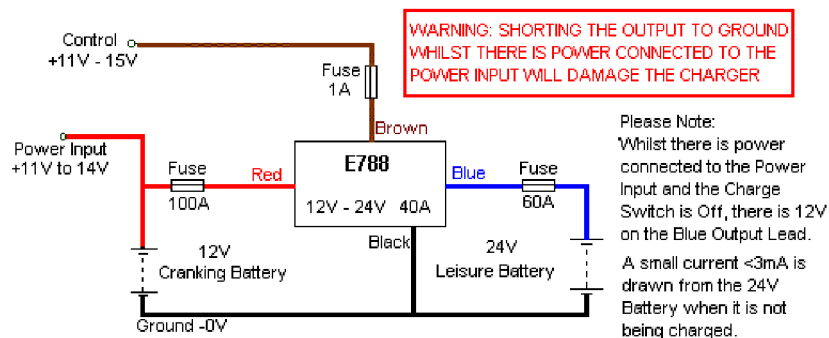
**CONTROL (BROWN): 1.0mm<sup>2</sup> CONDUCTOR CROSS SECTION (32/0.2mm)**

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 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 24V Leisure (Recipient) Battery preventing it from becoming over-charged / damaged and prevents the 12V Cranking Battery (Donor Battery) from becoming flat / exhausted.



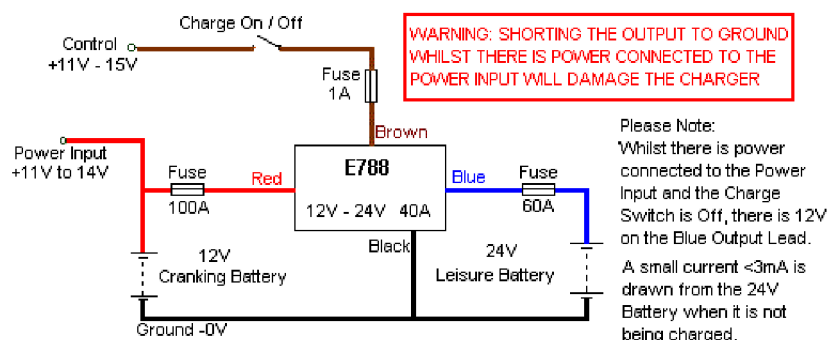
### **Wired to only operate when the engine is running**

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 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 24V Leisure (Recipient) Battery preventing it from becoming over-charged / damaged and prevent the 12V Cranking Battery (Donor Battery) from becoming flat / exhausted.



## **INSTALLATION INSTRUCTIONS:**

1. CONNECT THE BLUE LEAD TO the +VE CONNECTION OF THE 24V LEISURE / AUXILIARY BATTERY
1. CONNECT THE BLACK LEAD TO GROUND, IE: THE VEHICLE CHASSIS (COMMON NEGATIVE)
2. CONNECT THE RED LEAD TO THE +VE CONNECTION OF THE 12V CRANKING BATTERY
3. THE BROWN CONTROL LEAD GIVES YOU THE OPTION TO SWITCH THE BATTERY CHARGER ON AND OFF USING A STANDARD LOW CURRENT SWITCH.
4. ALTERNATIVELY YOU CAN CONNECT THE BROWN LEAD DIRECTLY TO THE POSITIVE INPUT, IE: THE +VE CONNECTION ON THE 12V 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) WHICH WILL ENABLE YOU TO RUN THE BATTERY CHARGER ALL THE TIME.
5. 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 12V 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**