E1153 30AMP SPLIT CHARGER 24V – 12V (26V Turn On)

24V TO 12V SPLIT CHARGER 30AMP ***Charge a 12V Battery from a 24V Battery System***
HIGH SPECIFICATION
MANUFACTURED IN THE UK

This Split Charger starts when the voltage reaches approximately 26V.

This Unit has a Brown Control Wire connection which is wired directly to the +ve Connection of the 24V Cranking (Donor) Battery. The Brown Control Wire senses the 24V Cranking (Donor) Battery Voltage and switches the Split Charger on only when the 24V Cranking (Donor) Battery is being charged.

Unlike Relay or Diode Split Chargers this Unit automatically controls the maximum charge into the 12V Leisure (Recipient) Battery preventing it from becoming over-charged / damaged and prevents the 24V Cranking Battery (Donor Battery) from becoming flat / exhausted



FRONT VIEW



REAR VIEW

- **PART NO: E1153**
- **TYPE: SWITCH MODE STEP DOWN SPLIT CHARGER**
- **CHARGING CURRENT: 30 AMP**
- **INPUT VOLTAGE: 18 TO 30V DC**
- **OUTPUT VOLTAGE: 14V DC**
- **CONTROL INPUT VOLTAGE (CVIN): CHARGER ENABLED: >26.5V DC / CHARGER DISABLED: < 25V DC**
- **OVERLOAD PROTECTION: YES**
- **POLARITY PROTECTED: EXTERNAL FUSE**
- **HIGH TEMP PROTECTED: YES**
- **SHORT CIRCUIT PROTECTION: YES**
- **EFFICIENCY: > 90%**
- **DIMENSIONS: 215mm X 100mm X 75mm**
- **FIXING CENTRES: 70mm X 200mm**
- **HOLE SIZE: 4.5mm**
- **WEIGHT: 1150g**
- **CONSTRUCTION: ANODISED COOLING PROFILE (TWIN)**

OEM AND TRADE ENQUIRIES WELCOME
MODELS ALSO AVAILABLE: 15A / 45A / 60A / 75A / 90A

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:

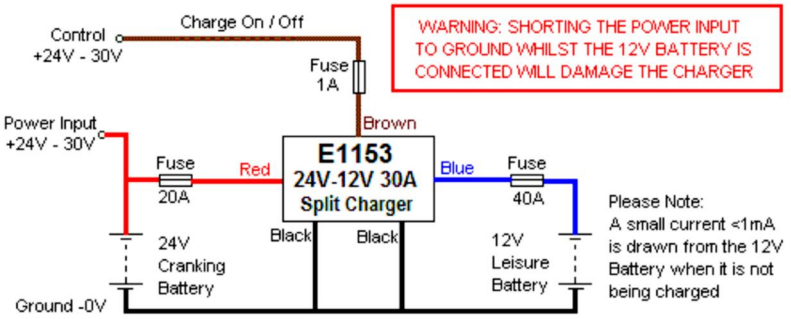
1 X 20A AUTOMOTIVE BLADE FUSE (COLOUR: YELLOW)
1 X 40A AUTOMOTIVE BLADE FUSE (COLOUR: ORANGE)
1 X 1A AUTOMOTIVE BLADE FUSE (COLOUR: BLACK)
3 X INLINE FUSE HOLDER (TO TAKE BLADE FUSES)

RECOMMENDED MINIMUM CABLES SIZES:
INPUT (RED): 6mm² CONDUCTOR CROSS SECTION (84/0.3mm)
OUTPUT (BLUE): 6mm² CONDUCTOR CROSS SECTION (84/0.3mm)
GROUND (BLACK)): 6mm² CONDUCTOR CROSS SECTION (84/0.3mm)
CONTROL (BROWN)): 1mm² CONDUCTOR CROSS SECTION (32/0.2mm)

The Split Charger can be wired in 2 ways:-

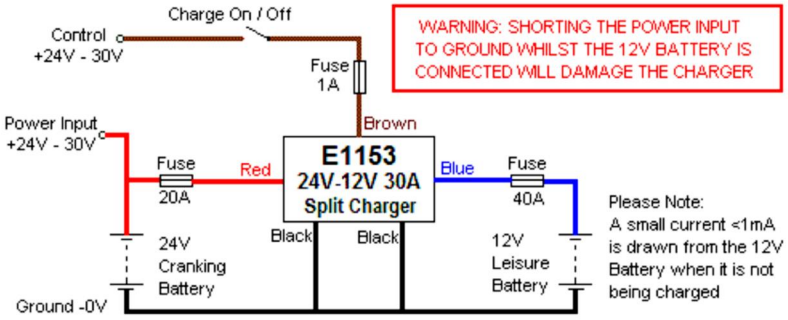
Wired as a fully automatic Split Charger

The Brown Control Wire Connection is wired directly to the +ve Connection of the 24V Cranking (Donor) Battery to switch the Split Charger on and off automatically.
In this case the Control Wire senses the 24V Cranking (Donor) Battery Voltage and switches the Split Charger on only when the 24V 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 24V Cranking Battery (Donor Battery) from becoming flat / exhausted.



Wired as a manually operated Split Charger

The Brown Control Wire Connection is wired via a Switch to the +ve Connection of the 24V Cranking (Donor) Battery to switch the Split Charger on and off manually.
In this case the Operator can control when the Split 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 24V Cranking Battery (Donor Battery) from becoming flat / exhausted.



INSTALLATION INSTRUCTIONS:

1. **CONNECT THE BLUE OUTPUT CONNECTION TO THE +VE CONNECTION OF THE 12V LEISURE / AUXILIARY BATTERY (FITTING 1 X INLINE FUSE HOLDER WITH 40A BLADE FUSE BETWEEN THE 12V BATTERY AND THE SPLIT CHARGER AS SHOWN ON WIRING DIAGRAM SUPPLIED WITH UNIT)**

2. **CONNECT ONE BLACK CONNECTION TO THE –VE CONNECTION OF THE 12V BATTERY**

3. **CONNECT ONE BLACK CONNECTION TO GROUND, IE: THE VEHICLE CHASSIS OR TO THE -VE CONNECTION OF THE 24V BATTERY**

4. **CONNECT THE RED INPUT CONNECTION TO THE +VE CONNECTION OF THE 24V CRANKING BATTERY (FITTING 1 X INLINE FUSE HOLDER WITH 20A BLADE FUSE BETWEEN THE 24V BATTERY AND THE SPLIT CHARGER AS SHOWN ON WIRING DIAGRAM SUPPLIED WITH UNIT)**

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

6. **CONNECT THE BROWN LEAD 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 BROWN LEAD DETECTS THE VOLTAGE OF THE BATTERY AND WHEN THE BATTERY VOLTAGE FALLS TO 25V 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

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