



Please note this is not a jump start device!

### FEATURES

- ★ Suitable for charging all 6V and 12V lead-acid batteries including; Wet (Flooded), Gel, MF (Maintenance-Free), CA (Calcium), EFB (Enhanced Flooded Battery), and AGM (Absorption Glass Mat) batteries
- ★ Designed for charging battery capacities from 2 to 30 Ah and maintaining all battery sizes
- ★ Stabilises internal battery chemistry for increased performance and longevity
- ★ LEDs dynamically track state of the battery charge
- ★ Four external holes for easy mounting
- ★ Supplied with 1.7 meter DC, 0.5 meter eyelet terminal connector quick charge and battery clamp leads

## 1. SAFETY

### WARNING:

The user must read and understand all of the product safety information prior to using the JEFBATC1.0-612 Dynamo 1A Battery Conditioner.



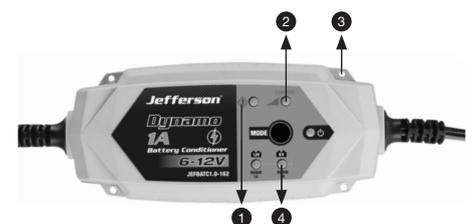
- The JEFBATC1.0-612 has been designed for charging all 6V and 12V lead-acid batteries including; Wet (Flooded), Gel, MF (Maintenance-Free), CA (Calcium), EFB (Enhanced Flooded Battery), and AGM (Absorption Glass Mat) batteries.
- Do not use this product to charge any products outside of its intended use.
- Before using the charger carefully read the battery manufacturer's specification, precautions and recommended rates of charge. Jefferson do not assume any liability for misuse of this charger.
- Batteries contain explosive gases. Charging should be carried out in a well ventilated and cool area away from sources of heat flames and sparks.
- Indoor use only. This charger must not be used outside in rain or snow conditions.
- Disconnect the mains cable. Before making or breaking the connection to the battery terminals, remove the plug from the power supply.
- Connect the charger carefully. Make sure the red clamp is attached to the battery positive terminal. The black clamp attaches to the negative. Do not reverse the clamps or allow them to touch each other.

- Refer to the vehicle manufacturers information. Follow these instructions fully to make sure no damage occurs to the vehicle or its equipment.
- Do not cover the charger. Allow air to circulate around the charger to prevent over heating.
- The charger is equipped with a time-lag fuse inside. Over-heating will trip the fuse to prevent damage and will not reset until sufficiently cooled.
- Do not use the charger within the vehicle. Stand it on a level firm surface to prevent damage to the charger or vehicle.
- Do not tamper with this product. Repairs and maintenance must be carried out by an authorised service agent. Do not modify this product in any way.
- Wear approved safety goggles (not safety glasses) and latex/nitrile gloves. Before charging a maintenance type battery the electrolyte (battery acid) must be filled to the maximum marked levels. Never use tap water. Distilled water or electrolyte must be used.
- Never attempt to charge non-rechargeable batteries. Only charge lead acid batteries within the voltage and amp hour capacities of the charger.
- Never attempt to charge a frozen battery.
- Never attempt to charge a damaged or distorted battery.
- Keep out of the reach of children.

## 2. CHARGING MODES

The JEFBATC1.0-612 has four modes: 12V NORM/1A, 12V COLD AGM/1A. Please carefully choose the appropriate mode.

Mode	Explanation
12V NORM/1A	For charging 12V wet cell, Gel cell, Enhanced flooded, Maintenance-free and Calcium batteries. When selected, a LED will illuminate. Battery size 2-35Ah.
6V NORM/1A	For charging 6V batteries in cold temperatures below 50F (10°C) or AGM batteries. When selected, a blue LED will illuminate. Battery size 2-35Ah.



1. Incorrect Polarity light
2. Charging indicator
3. Four holes for mounting
4. Charging mode indicator

### 3. SPECIFICATION

Input Voltage AC:	AC 220~230V, 50~60Hz
Working Voltage AC:	AC 180~250V, 50~60Hz
Efficiency:	Approx 85%
Power:	Max 20W
Charging Voltage & Current:	6V/12V --- 1A
Low-Voltage Detection:	3V
Back Current Drain:	<5mA
Ambient Temperature:	0°C ~+40°C
Charger Type:	6 Step, Smart Charger
Types of Batteries:	6/12V
Battery Chemistries:	Wet, Gel, MF, CA, EFB, AGM
Battery Capacity:	2-30Ah
Housing Protection:	IP54
Cooling:	Natural Convection
Dimensions (L x W x H):	155 x 70 x 40mm
Weight:	0.40Kg

### 4. CONNECTING THE BATTERY

1. Connect the positive (red) battery clamp or eyelet terminal connector to the positive (POS,P,+) battery terminal.
2. Connect the negative (black) battery clamp or eyelet terminal connector to the negative (NEG,N,-) battery terminal or vehicle chassis.
3. Connect the battery charger's AC power plug into the mains power supply.
4. When disconnecting the battery charger, disconnect in the reverse sequence, removing the negative first.

**Note:** LED will indicate a solid Red if the battery clamp or eyelet terminal connector are connected to the wrong terminal, reverse the battery connectors.

### 5. CHARGING THE BATTERY

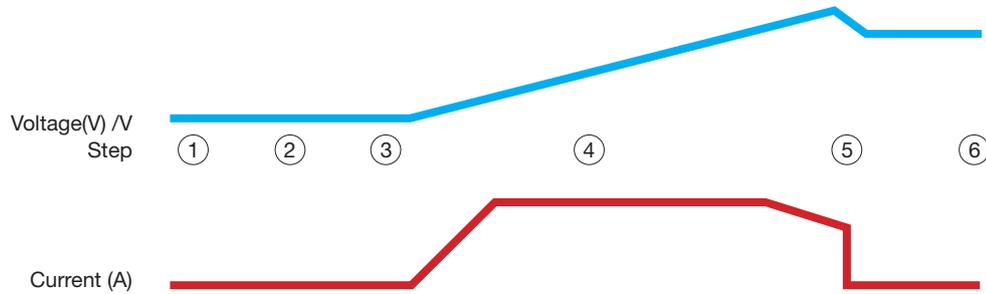
1. Ensure that the battery clamps and eyelets are connected to the terminals connectors properly and the AC power supply is plugged into the mains power supply.
2. All LED will flash once after starting, and then proceed into the previously selected memory mode automatically after 10s.
3. Ensure the JEFBATC1.0-612 is set to the correct mode for the battery. Press the mode button to toggle to the appropriate charge mode.
4. The charging indicator light will flash to indicate that charging is in progress, once the battery has been fully charged the flashing will stop and the charging indicator light will remain fully illuminated.

### 6. INCORRECT POLARITY WARNING

When the error LED warning is flashing, it denotes a potential error in the battery conditioner. Several potential errors include;

1. Battery is not connected
2. Battery voltage is too low
3. Battery is connected incorrectly

## 7. CHARGING PROCESS



Step	Explanation
1 & 2: Analyse and diagnose	Checks the battery's condition and voltage
3: Inspection	Checks if the battery is connected incorrectly
4: Bulk	Begins the bulk charging process based on the condition of the battery and returns 80% of the battery's capacity
5. Float	Brings the charge to its maximum capacity by delivering small amounts of current to charge
6. Finalise	Finalises the charging process and charging will be stopped. Charging will be restarted when battery voltage is low down a rated value.

## 8. CHARGING TIME

Battery Size/Ah	Approx. Time to charge in hours
10	5
20	10
30	15

## 9. MOUNTING

The JEFBATC1.0-612 Dynamo 1A Battery Conditioner has four external holes for mounting. Mount the charger in the desired location using the M3 self drill screws (supplied).

- Ensure there are no obstructions behind the mounting surface.
- **IMPORTANT:** keep in mind the distance to the battery to ensure the supplied leads will reach. The DC cable length from the charger is approximately 1.7 meters.

## LIMITED WARRANTY STATEMENT

Jefferson Professional Tools & Equipment, or hereafter "Jefferson" warrants its customers that its products will be free of defects in workmanship or material. Jefferson shall, upon suitable notification, correct any defects, by repair or replacement, of any parts or components of this product that are determined by Jefferson to be faulty or defective.

This warranty is void if the equipment has been subjected to improper installation, storage, alteration, abnormal operations, improper care, service or repair.

### Warranty Period

Jefferson will assume both the parts and labour expense of correcting defects during the stated warranty periods below.

All warranty periods start from the date of purchase from an authorised Jefferson dealer. If proof of purchase is unavailable from the end user, then the date of purchase will be deemed to be 3 months after the initial sale to the distributor.

#### 1 Year

- Jefferson Dynamo 1A Battery Conditioner (JEFBATC1.0-612).

#### 90 Days

- All replacement parts purchased outside of the warranty period

**Important:** All parts used in the repair or replacement of warranty covered equipment will be subject to a minimum of 90 days cover or the remaining duration of the warranty period from the original date of purchase.

### Warranty Registration / Activation

You can register and activate your warranty by visiting the Jefferson Tools website using the following address:

[www.jeffersontools.com/warranty](http://www.jeffersontools.com/warranty) and completing the online form.

Online warranty registration is recommended as it eliminates the need to provide proof of purchase should a warranty claim be necessary.

### Warranty Repair

Should Jefferson confirm the existence of any defect covered by this warranty the defect will be corrected by repair or replacement at an authorized Jefferson dealer or repair centre.

### Packaging & Freight Costs

The customer is responsible for the packaging of the equipment and making it ready for collection. Jefferson will arrange collection and transportation of any equipment returned under warranty. Upon inspection of the equipment, if no defect can be found or the equipment is not covered under the terms of the Jefferson warranty, the customer will be liable for any labour and return transportation costs incurred. These costs will be agreed with the customer before the machine is returned.

**NOTE:** \* Jefferson reserve the right to void any warranty for damages identified as being caused through misuse \*

### Warranty Limitations

Jefferson will not accept responsibility or liability for repairs made by unauthorised technicians or engineers. Jefferson's liability under this warranty will not exceed the cost of correcting the defect of the Jefferson products.

Jefferson will not be liable for incidental or consequential damages (such as loss of business or hire of substitute equipment etc.) caused by the defect or the time involved to correct the defect. This written warranty is the only express warranty provided by Jefferson with respect to its products.

Any warranties of merchantability are limited to the duration of this limited warranty for the equipment involved.

### Claiming Warranty Coverage

The end user must contact Jefferson Professional Tools & Equipment: **(Tel: +44 (0) 1244 646 048)** or their nearest authorised Jefferson dealer where final determination of the warranty coverage can be ascertained.

#### Step 1 - Reporting the Defect

##### Online Method:

Visit our website [www.jeffersontools.com/warranty](http://www.jeffersontools.com/warranty) and complete the Warranty Returns form. You can complete the form online and submit it to us directly or download the form to print out and return by post.

##### Telephone Method:

Contact your Jefferson dealer or sales representative with the following information:

- Model number
- Serial number (usually located on the specification plate)
- Date of purchase

A Warranty Returns form will be sent to you for completion and return by post or fax, together with details of your nearest authorised Jefferson repair centre. On receipt of this form Jefferson will arrange to collect the equipment from you at the earliest convenience.

#### Step 2 - Returning the Equipment

It is the customer's responsibility to ensure that the equipment is appropriately and securely packaged for collection, together with a copy of the original proof of purchase. Please note that Jefferson cannot assume any responsibility for any damage incurred to equipment during transit. Any claims against a third party courier will be dealt with under the terms & conditions of their road haulage association directives.

**NOTE:** Jefferson will be unable to collect or process any warranty requests without a copy of the original proof of purchase.

#### Step 3 - Assessment and Repair

On receipt, the equipment will be assessed by an authorised Jefferson engineer and it will be determined if the equipment is defective and in need of repair and any repairs needed are covered by the warranty policy. In order to qualify for warranty cover all equipment presented must have been used, serviced and maintained as instructed in the user manual.

Where repair is not covered by the warranty a quotation for repair, labour costs and return delivery will be sent to the customer (normally within 7 working days). Note: If the repair quotation is not accepted Jefferson Professional Tools & Equipment will invoice 1 hour labour time at £30 per hour plus return carriage costs (plus VAT).

In cases where no fault can be found with the equipment, or, if incorrect operation of the equipment is identified as the cause of the problem, a minimum of 1 hour labour at £30 per hour plus carriage costs will be required before the equipment will be despatched back to the customer.

Any equipment repaired or replaced under warranty will normally be ready for shipment back to the customer within 7 working days upon receipt of the equipment at an authorised Jefferson Repair centre (subject to part availability). Where parts are not immediately available Jefferson will contact you with a revised date for completion of the repair.

### General Warranty Enquiries

For any further information relating to Jefferson warranty cover please call: **+44 (0) 1244 646 048** or send your enquiry via email to [warranty@jeffersontools.com](mailto:warranty@jeffersontools.com)

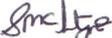
#### Disclaimer:

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## EC DECLARATION OF CONFORMITY

We, Jefferson Professional Tools & Equipment, as the authorised European Community representative of the manufacturer, declare that this equipment conforms to the requirements of the following Directives:

2014/30/EU - Electromagnetic compatibility

Signed By: Stephen McIntyre  Date: 4th July 2018

### Name and address of manufacturer or authorised representative:

Jefferson Tools, Herons Way, Chester Business Park, Chester, United Kingdom, CH4 9QR

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Fax: +44 (0)1244 241 191

Email: [enquiries@jeffersontools.com](mailto:enquiries@jeffersontools.com)

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