

Linear Equipment Range of Automatic Battery Chargers



(shown in protective cover)



(shown as open frame unit)

Description

The Linear Equipment Charger is a highly efficient high performance charger. The very smooth output is configured for accurate fast charging, optimum battery life and reliability. The charger is designed to cater to continuous float charging and standby battery applications when used in it's manual boost mode. Due to its very smooth output (< 1% ripple) the charger is suitable for VRLA or vented lead acid batteries. The charger has a jumper switchable between two modes of operation, auto 3 stage (jumper off) and manual boost mode (jumper on) as outlined below -

Auto 3 Stage Operation

The output current of the charger is limited to a low value until the battery reaches a specific voltage, preventing high charge current if a cell is shorted. Above this level the bulk charge phase starts supplying maximum current to the battery. This is indicated by the yellow "bulk" LED. This continues until the bulk voltage is reached when the current will start to fall. When it has fallen to 10% of the maximum bulk current the float phase will begin, indicated by the green "float" LED. Table over leaf shows details of charging voltages.

Manual Boost Operation

The charger will give a constant current output up to its knee point (13V on a 12V LA) at which point the current will ramp down as the battery reaches it's float voltage. This gives an optimum charge time to ensure that the battery voltage is maintained at the pre-calibrated float level, whilst supplying any additional standing load current up to a specified maximum. The battery charger is designed so that it can be permanently connected to the battery. The 'boost' mode of operation provides increased voltage output. Selection of boost mode is by connecting between the Negative output and Boost (Bst) terminals. Table over leaf shows details of float and boost voltages.

- **Float Charging**
1A @ 6V or 12V - 600mA @ 24V
- **VRLA or vented lead acid**
- **Low Ripple**
- **Auto 3 stage operation**
- **Optional boost mode**
- **Optional protective cover**

Product Specification

Power Supply:

Nominal Operating Voltages 110-120V,AC (115V units)
205-254V,AC (230V units)

Nominal Operating Frequency 50 - 60Hz

DC Charge Output:

Output Current A,DC	1	1	0.6
Nominal Voltage V,DC	6	12	24
Line Regulation	< 1%		
Load Regulation	< 1%		
Output Ripple	< 1%		
Float / Bulk Voltages	see table overleaf		

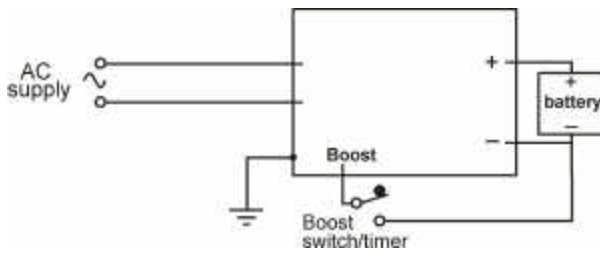
General:

Operating Temperature 0 to +40°C
Overall Dimensions (w x h x d) see overleaf

Weight 1.28Kg in cover (2.8lbs)
0.9Kg open frame (1.98lbs)

EMC Emission / Immunity EN 58801-2 / EN50082-2

Electrical connection



Notes:

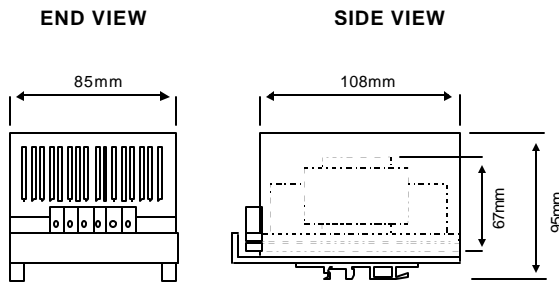
- 1) battery output is isolated from chassis
- 2) chassis must be connected to a low impedance earth

Calibration

Battery type		float volts (VDC)	boost volts (VDC)
6V	Lead Acid (6 cells)	6.9	7.27
12V	Lead Acid (12 Cells)	13.8	14.5
24V	Lead Acid (24 Cells)	27.2	29.0

The above are factory standard settings. Specials are available on request.

Dimensions



PLAN VIEW

	Width (mm)	Height (mm)	Depth (mm)
<u>Open Frame</u>			
All Models	61	135*	67
<u>With Cover</u>			
All Models	85	125	95

Note: The open frame model has an extended back plate which has 4 mounting holes for easy installation whilst the Protective cover is fitted with DIN clips.

How to order

When ordering, please specify -

PRODUCT	Nominal Output V,DC			Nominal Output Current	
	6	12	24	1	600mA
LER61	•			•	
LER121		•		•	
LER24600			•		•

CODE	INPUT VOLTAGE	
	115V,AC	230V,AC
C	•	
D		•

	BATTERY TYPE	
	Lead Acid	VRLA
LA	•	
VRLA		•

	OPTIONS	
	Manual Boost	Protective Cover
MB	•	
PC		•

Product **Input volts** **Battery type**

The above 3 part number codes must be filled in to complete your order

LER121

C

VRLA

Options

Options

Insert options when required, if no options are required, leave empty

MB

The above example shows the order code for 115V,AC input, 12V@1A,DC output charger calibrated for a VRLA battery and with manual boost option.

	North American Distributor - PC & S / Panel Components & Systems, Inc. 149 Main Street 213 Jespersen Avenue 8539 Monroe Road (Suite 104) Stanhope Spruce Grove Charlotte New Jersey Alberta North Carolina 07874 T7X 2J1 28212 Phone (800) 523 9194 Phone (877) 962 0557 Phone (704) 535 3357 Fax (973) 448 1674 Fax (780) 962 0557 Fax (704) 535 6288		
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