Power Booster

Power Booster and Integrator



Typical running at 400W outs

Complete heavy duty power system for cranes and other remote power feed situations.

Power Boost: Step up your 24-30V Batteries to 30V nominal. With

remote sense the boost can be as high as 36V to

overcome power loss on long cable runs.

Integrator: Combine any two suitable Batteries into one output.

Batteries are Hot-swappable which means the unit does

not need to be powered off to change or add another

battery.

The Booster Module is fitted permanently into the case. There are two spaces for the batteries, two for the chargers and a single space to hold the cables.

Also note that the case features a small cable feed-through port on the front. This allows the entire unit to be used in light rain conditions with the case closed.

designed by: Elemér Nyíry

manufactured by:

CINE POWER INTERNATIONAL LTD

MAGNOLIA LAKE - MAMHEAD - EXETER - DEVON - EX6 8HG - UNITED KINGDOM

TEL: +44 (0)1626 888433 - FAX: +44 (0)1626 888435 - WEB: cinepower.com





Power Booster Integrator

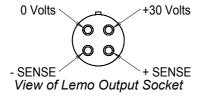
SPECIFICATIONS

Special Features

- Remote sensing with up to 20% automatic voltage trim for cable loss.
- Dual input, wide range.
- Output voltage and current display.

Electrical Specifications

- Input ports: Dual input with common negative, isolated positives.
- Input voltage: 22 35 VDC
- Max. input current: 30A DC 42A peak.
- Input fuse: 30A DC, dual function switch.
- Input connectors: 3 pole XLR
 Pin 1 Neg; Pin 2 Pos.
- Output voltages: 30VDC with remote sensing disabled.
 With remote sensing: 30VDC + V_{LOSS} = 36VDC
- Output current: 12A cont. 20A peak. Note: 2 batteries connected on the inputs are recommended for peak output.
- Output power: 400W cont. 600W peak.
- Output connector: Lemo 4 pole fitted as standard. Other types can be specified.



Batteries

- Space for two Mega-Force batteries.
- Capacity of each is 17Ah at 30V
- Chemistry: NiMH
- Over-discharge protected to prolong battery life.
- Electronic self-resetting fuse will protect the battery in the event of a short-circuit condition.
- Batteries feature approximate capacity level indicator.
- Ultra-rugged and proven construction based on over 35 years of battery design and manufacture.

Chargers

- Space for two Mega-Maxi-D chargers.
- Each battery requires one Mega-Maxi-D charger.
- Re-charge time from flat approx. 4 hours.
- Chargers are dual channel and can be used to charge your existing 30V batteries. NiCad or NiMH.

Case

- All aluminium compact design, constructed from the highest quality materials.
- Suitable for air-transit.
- Dimensions: 620mm wide, 310 mm tall, 275mm deep.
- Weight with 2 Batteries and 2 Chargers: 30Kg.

OUTPUT Remote Socket

+ Sense Out
+ Power Out
- Power Out
- Sense Out

VLoss on cable under load



Operational Information

Performance

Typical performance in excess of $2\frac{1}{2}$ hours at 400W output. This is achievable using two fully charged batteries supplied at average room temperature.

Remote Sense

Remote sensing is designed to overcome the voltage loss, on the output cables under load. It is important to terminate the remote sense wires at the output socket of the cable at all times!

If the remote sense fails, the output of the booster will limit at 36V DC. The output will also limit at 36V DC if remote sense is selected with an incorrect cable.

Output Voltage and Current Display

The LCD Voltmeter fitted indicates the output voltage at the output socket of the unit, not at the load. Typical accuracy of this meter is +/- 0.1V. The LCD Ammeter shows the actual current taken from the Booster and delivered to the load. The accuracy of the output LCD Current meter is typically +/- 0.1A

Other Indicators

The green LED indicates that the unit is powered on.

The red LED will illuminate under the following conditions:

- 1) Remote sense is selected, but there is no cable connected to the output to provide a remote sense feedback to the unit.
- 2) When the output rises to 35V to correct against V_{Loss}. The red LED is indicating that the output is at maximum output, voltage limit has been reached. To reset from voltage limit, either power-cycle the unit, or toggle the remote sense switch with the load disconnected.

Custom Versions

Every aspect of the *Power Booster Integrator* design can be customised to meet your requirements. Please do not hesitate to contact us to discuss your needs further.

Cine Power International Ltd.
Magnolia Lake, Mamhead
Exeter, Devon
EX6 8HG
United Kingdom

Tel: +44 (0)1626 888433 Fax: +44 (0)1626 888435 Web: cinepower.com Email: diane@cinepower.com

Note: Specifications subject to change without notice. Page: 3