

CR03H205



3-Bay Power Box Instructions for use

The CR03H205 is a 3-bay power box, and is comprised of 3-single slot chargers for re-charging smart battery packs. It works with the Inspired Energy® brand “NH2054” and “NH3054” Series smart standard packs.

What’s in the box?

1. One CR03H205 3-bay power box.
2. One 160W 24VDC 6.67A power supply with universal mains input.

Safety:

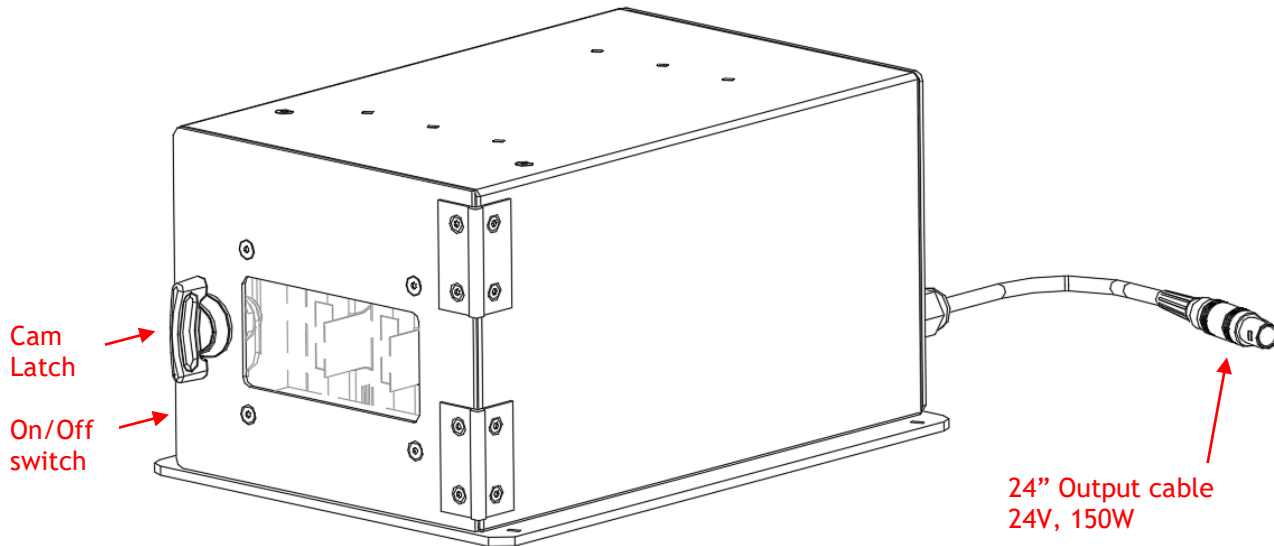
1. Do not expose the power box or power supply to water or liquids.
2. Do not open the power box or power supply case, no user serviceable parts are inside.
3. Do not plug output cable into input jack.
4. Place the power box in a cool spot, away from external heat sources.

Compatibility:

The CR03H205 is fully compatible with all Inspired Energy® brand “NH2054” and “NH3054” Series standard battery packs. While the CR03H205 may work with other branded battery packs, for optimum results we recommend using Inspired Energy® brand batteries.

Using your Charger:

Ensuring the power box is kept away from sources of heat and moisture, plug the LEMO input power cord into the back of the power box.



Charging:

Place a battery into one of the battery bays ensuring that the 5-way connector is fully engaged. The LEDs in the corresponding status window will provide status information and the power box will automatically begin charging.

LED Indication:

The status of each battery/charger is indicated by the LEDs visible in the corresponding status window:

- * Green flashing: Battery charging
- Green solid: Battery fully charged
- Blue solid: 24V Output ON
- Red solid: Error

Recharge Time:

The time given below is for a full charge from 0% to 100% state of charge. It is valid for the batteries shown below.

Battery Chemistry	Battery Model	Recharge Time (hours)
Li-ion	NH2054, NH3054	3

How does the power box know what charge to deliver?

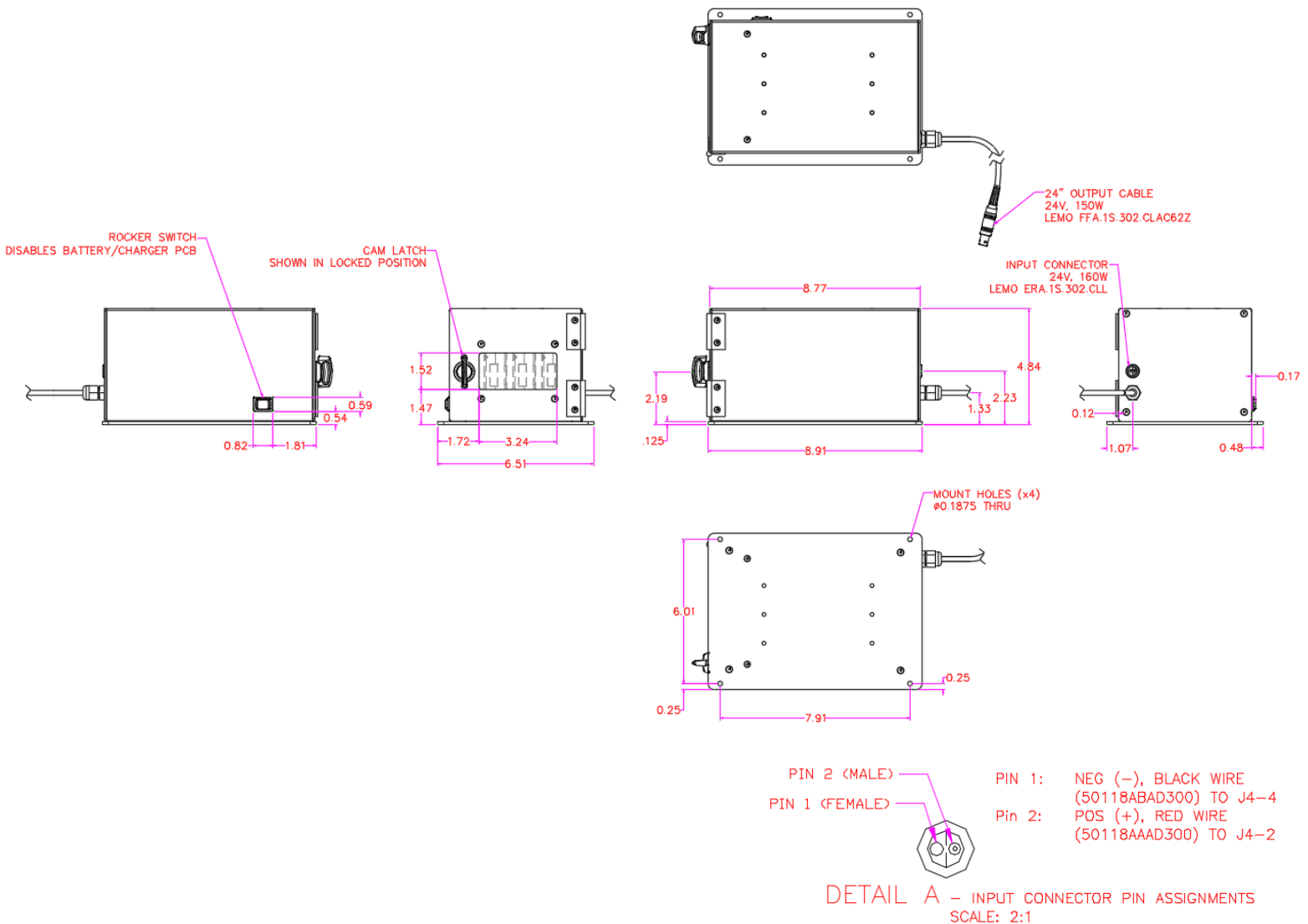
Each charger unit in the power box is capable of sensing and delivering an appropriate charge to all Inspired Energy Li-ion “NH2054” and “NH3054” Series standard battery packs. Upon inserting the battery into the power box, the battery communicates to the charger over the SMBus telling the charger what type of charge regime it needs. The charger then configures its output to provide the charge regime requested by the battery. If no SMBus communications are issued from a battery, the respective charger interrogates the thermistor/resistor I.D. pin on that battery terminal and delivers an appropriate charge.

Output:

As a pass-through design, the higher voltage of either the input supply to the power box or the battery packs is connected to the output. The input voltage must be greater than 20VDC for the pass-through voltage to be present at the output. If there is no input supply and the batteries are all fully discharged, or not present, then there will be no output voltage. When operating on battery power only, the fully discharged status will not clear, and will not produce an output voltage until at least one battery pack has charged to 20% state of charge. This output enable delay is to prevent power on/off glitches. This 20% allows for enough runtime to be able to perform most actions required. The CR03H205 is capable of delivering a total of 30A from the battery packs (10A each). The output is boosted to 24V, and is capable of delivering 6.25Amps (150 Watts continuous). The Output is circuit breaker protected at 7.5amps.

CR03H205A/E/U/X Specification Summary

Weight:	1.86kg / 65.61oz
Height:	123.5mm / 4.85"
Length:	226.75mm / 8.92"
Width:	143.52mm / 5.65"
Mating Connector:	4-Position Circular LEMO Connector
Communications Compliances:	System Management Bus Rev 1.1, Smart Battery Data Specification Rev 1.1 and Smart Battery Charger Specification Rev 1.1 compliant
Power Supply:	100-240VAC, 24V, 6.67A DC, 175x74x42mm, 700g / 25oz UL listed, CE Compliant
Mains Cord:	CR03H205A - 110V N. American 3-pin connector CR03H205E - 220V European 2-pin connector with ground recess CR03H205U - 240V UK 3-pin connector CR03H205X - No AC cable supplied



Note: Units shown in inches.