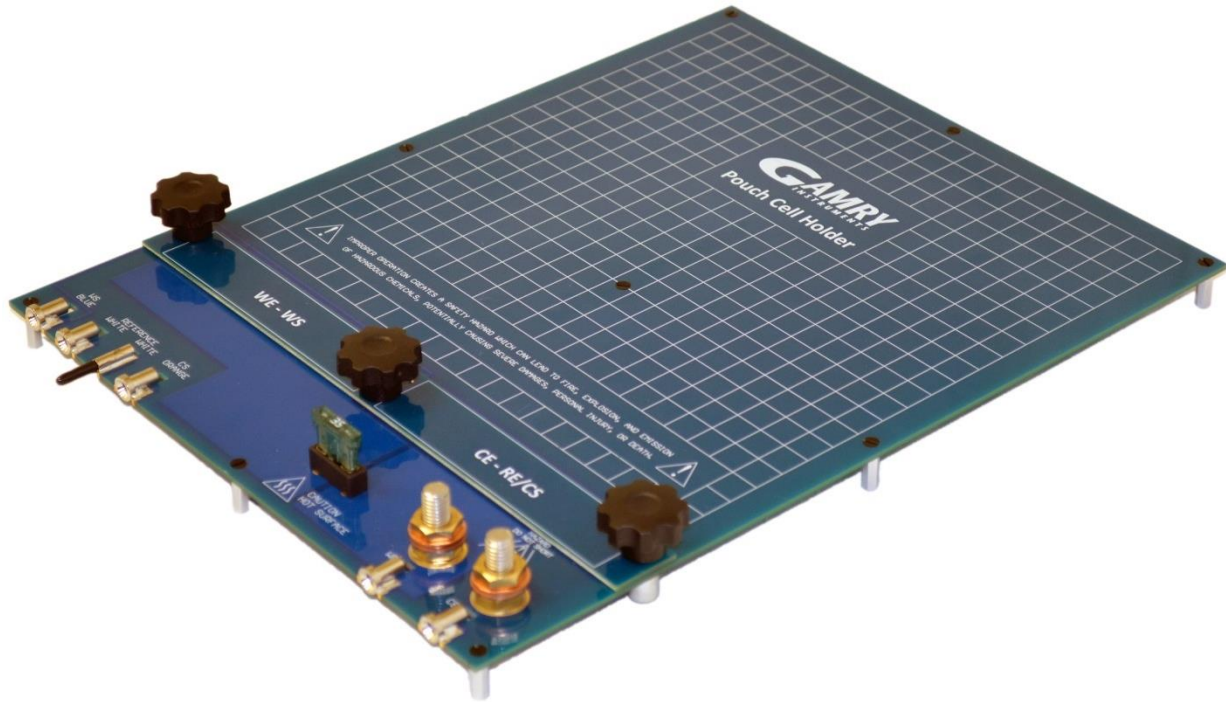




Pouch Cell Holder

Operator's Manual



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Revision 1.1
March 14, 2019
988-00069

Limited Warranty

Gamry Instruments, Inc. warrants to the original user of this product that it shall be free of defects resulting from faulty manufacture of the product or its components for a period of one year from the original shipment date of your purchase.

Gamry Instruments, Inc. makes no warranties regarding either the satisfactory performance of the cell kit or the fitness of the product for any particular purpose. The remedy for breach of this Limited Warranty shall be limited solely to repair or by replacement, as determined by Gamry Instruments, Inc., and shall not include other damages.

Gamry Instruments, Inc. reserves the right to make revisions to the product at any time without incurring any obligation to install same on systems previously purchased. All product specifications are subject to change without notice.

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This Limited Warranty gives you specific legal rights and you may have others which vary from state to state. Some states do not allow for the exclusion of incidental or consequential damages.

No person, firm, or corporation is authorized to assume for Gamry Instruments, Inc., any additional obligation or liability not expressly provided herein except in writing duly executed by an officer of Gamry Instruments, Inc.

If You Have Problems

Please visit our service and support page at www.gamry.com/service-support/.

This page contains information on installation, software updates, and training. It also contains links to the latest available documentation. If you are unable to locate the information you need from our website, you can contact us via form submission using the link provided on our website. Alternatively, you can call us using one of the telephone numbers listed below:

Tech support form	www.gamry.com/service-support/contact-technical-support/
Telephone	(215) 682-9330 9:00 AM–5:00 PM US Eastern Standard Time (877) 367-4267 Toll-free US & Canada Only

Replacement parts for this kit are available from Gamry Instruments, Inc. Optional parts may be available from Gamry Instruments, or from third-party vendors. Contact your local Gamry sales representative to discuss any special requirements or accessories that you need.

Disclaimer

The information in this manual has been carefully checked and is believed to be accurate as of the time of printing. However, Gamry Instruments, Inc. assumes no responsibility for errors that might appear.

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Introduction

The Pouch Cell Holder allows the researcher to connect a large variety of pouch cells to Gamry Instruments' potentiostats. High currents, up to 30 A, may be passed through the battery holder, without danger of destroying the holder. The Pouch Cell Holder allows four-point measurements, and is usable with all Gamry Instruments potentiostats, including the 30k Booster.



Both electrodes on the pouch cell must be on the same end to use a pouch cell with this equipment.



Warning: Improper operation creates a safety hazard which can lead to fire, explosion, and emission of hazardous chemicals, potentially causing severe damage, personal injury, or death. Gamry Instruments, Inc. is not responsible for battery failures caused by misuse of the equipment or defects in battery construction.

Parts List

After you remove the parts for the Pouch Cell Holder Kit (#992-00132) from the shipping carton, check for any signs of shipping damage. If you note any damage, please notify Gamry Instruments, Inc. and the shipping carrier immediately. Save the shipping container for possible inspection by the carrier.

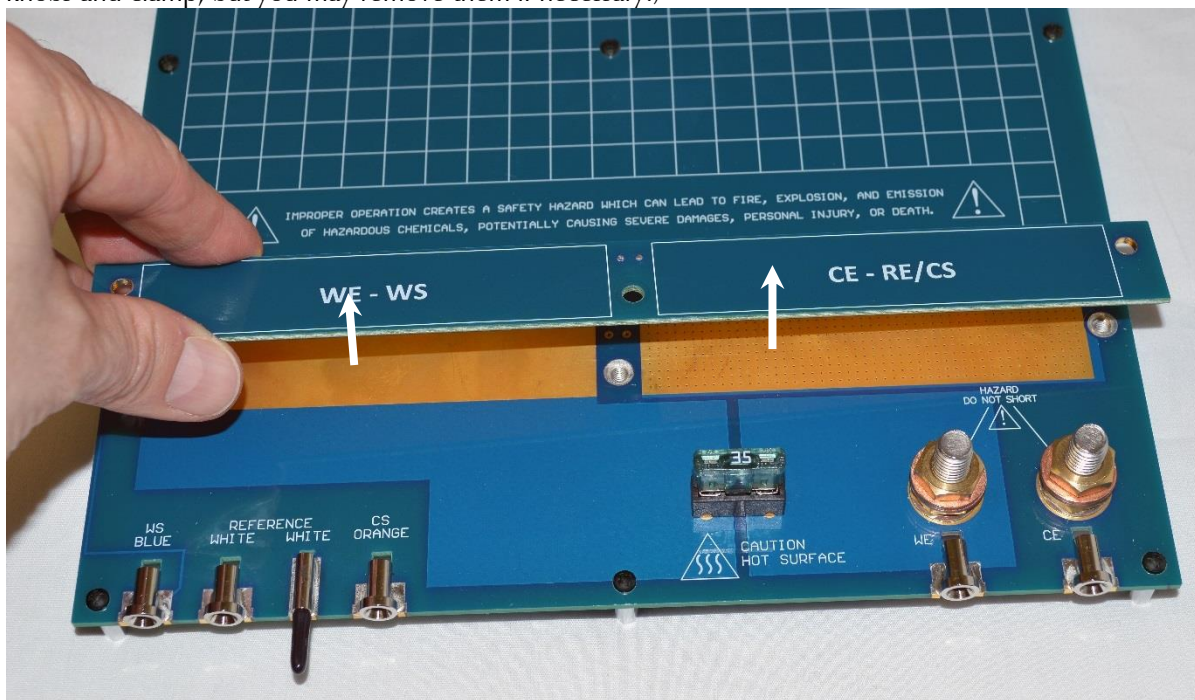
Quantity	Part Number	Description
1	630-00034	auto blade fuse 35 A, 32 VDC
1	988-00069	Pouch Cell Holder Operator's Manual
1	990-00406	Reference 600+™ cable accessory kit
1	990-00482	Pouch Cell Holder

Placing the Battery in the Holder

1. Loosen the three knobs on the sense clamp.



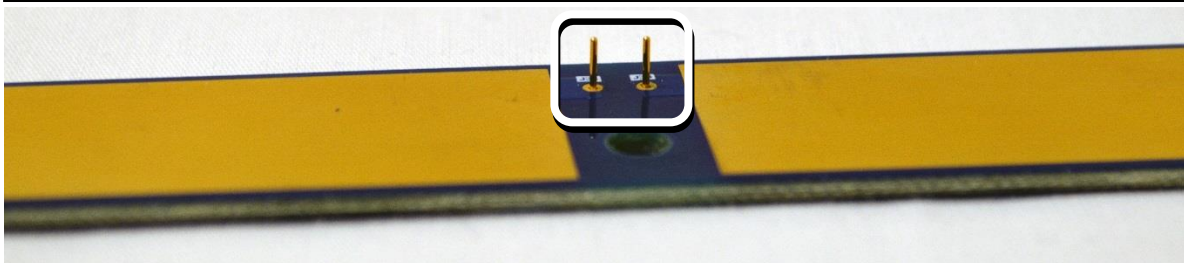
2. Carefully raise the sense clamp. (For most pouch cells you should not need to completely remove the knobs and clamp, but you may remove them if necessary.)



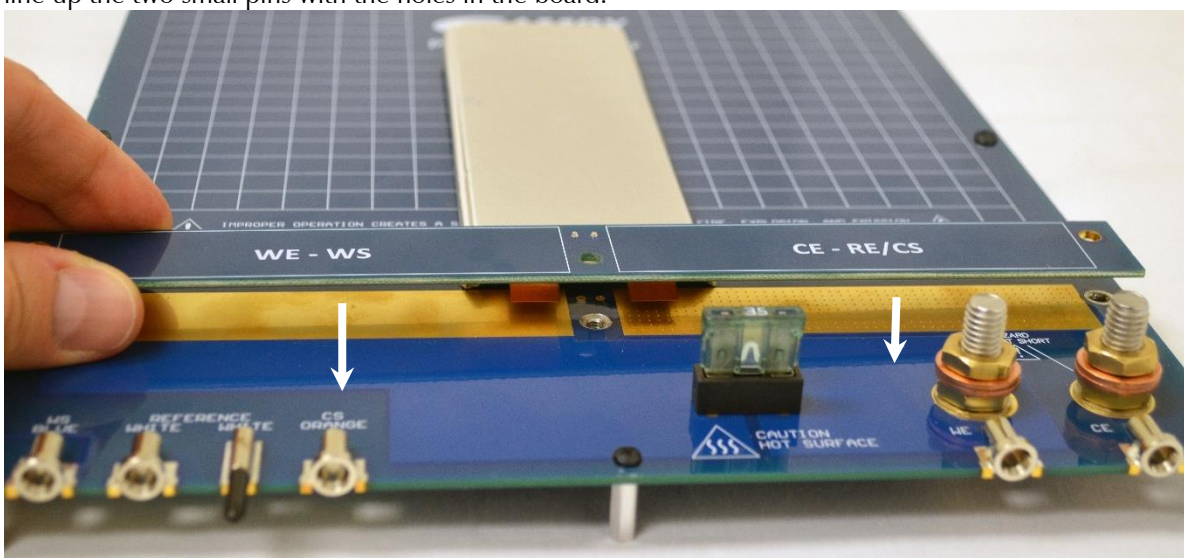
Placing the Battery in the Holder



Caution: The underside of the sense clamp has two metal pins. These are used for four-point measurements. Take care not to bend or break them during assembly.



3. Place the pouch cell on the printed-circuit board, sliding the positive electrode over the left (Working) and the negative electrode over the right (Counter) pads. Lower the sense clamp onto the board. Be careful to line up the two small pins with the holes in the board.



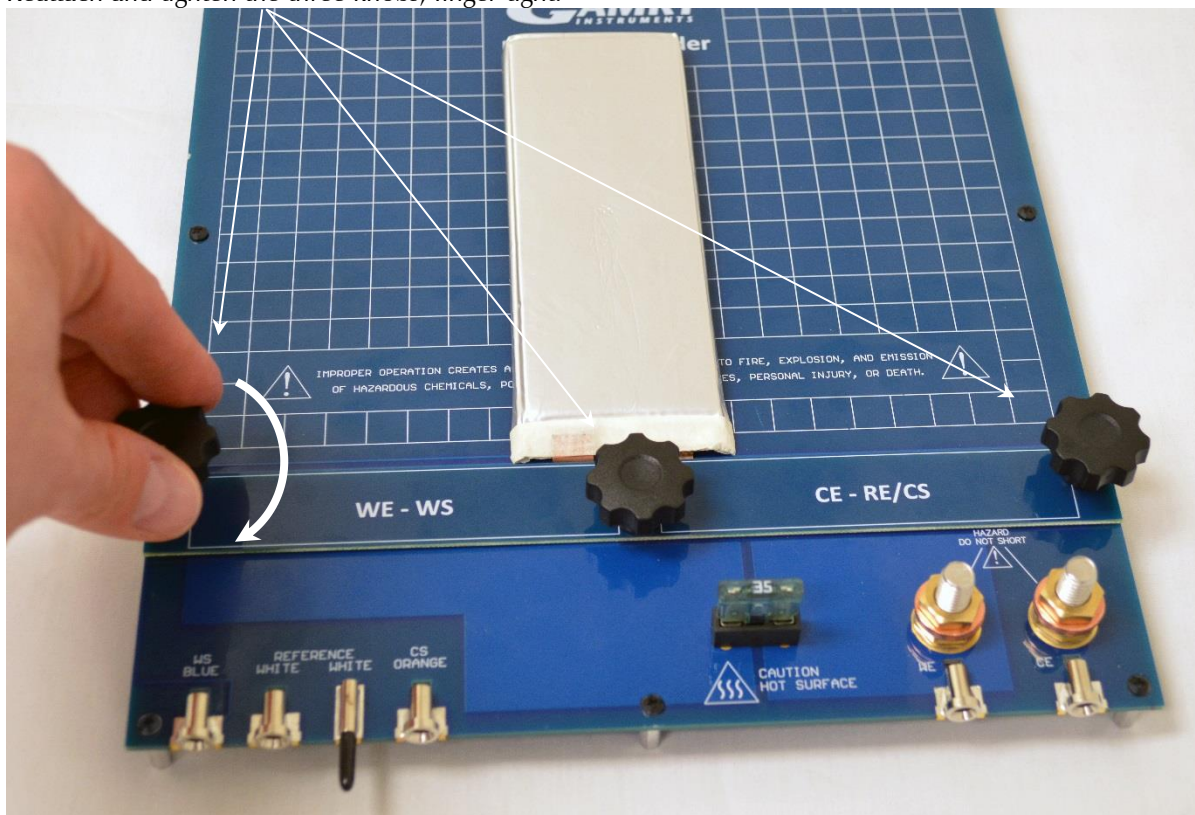
Caution: Take care not to bend or break the two metal pins during assembly. Do not bend the sense clamp too much, or it will break.



You may use the grid printed on the platform to align your pouch cell.

Connecting the Pouch Cell Holder to Instruments

4. Reattach and tighten the three knobs, finger-tight.



Caution: Never tighten the knobs using pliers. The printed-circuit boards can crack.

Connecting the Pouch Cell Holder to Instruments



instrument.

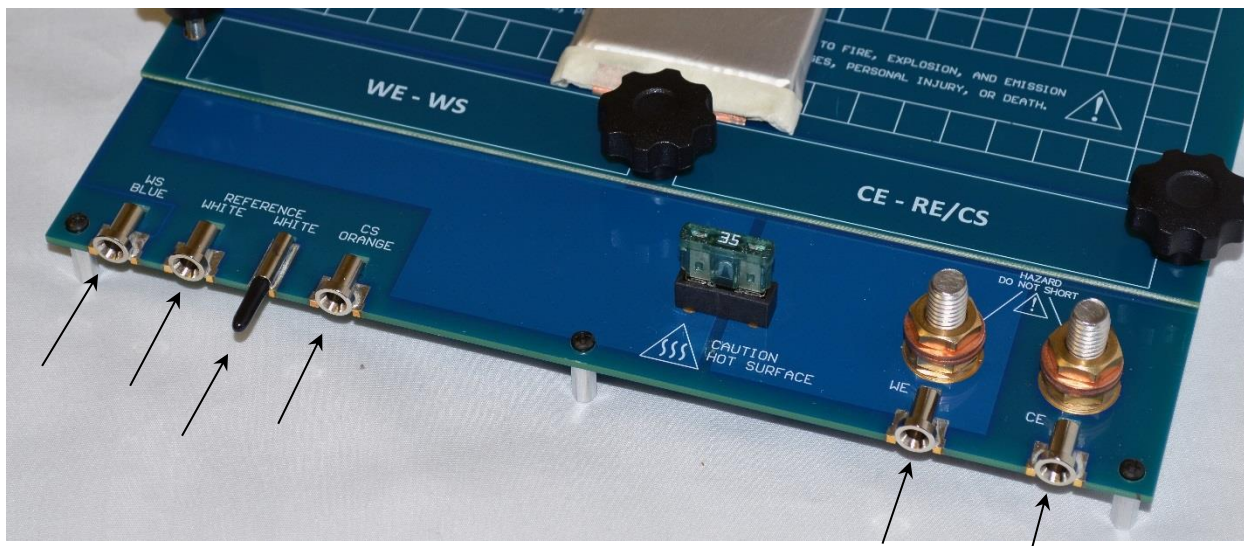
Be sure to follow the color-coding and labels for connecting the correct cables to your



Warning: Never short the WE (Working Electrode) and CE (Counter Electrode) connectors! Doing so can cause sparks, injury, and fire hazards.

General Gamry Instruments Potentiostats

Standard 4-mm banana-plug receptacles are mounted on the front edge of the holder to connect to your potentiostat. A dual receptacle or pin connection is available for the reference electrode. Be sure to remove the plastic guard from the pin on the reference connection before use. For the Reference 600+ Potentiostat, we supply 4-mm-to-2-mm adapters.



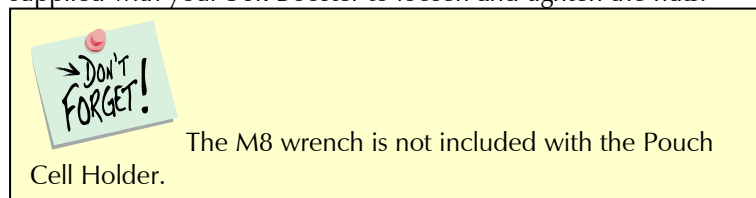
Warning: The reference banana plug is sharp and can cause injury. Be careful when connecting this pin to your cables. When it is not in use, always keep the plastic guard over the pin as a safety precaution.

Other Potentiostats

The Pouch Cell Holder may be connected to potentiostats made by other manufacturers, but ensure that you follow the manufacturer's guidelines for connecting current-carrying cables (counter and working) as well as the sense leads (reference and working sense). Their color-coding of the cables may not follow our scheme.

30k Booster

The Pouch Cell Holder is compatible with Gamry Instruments' 30k Booster™ for high-current work. Connect the Booster to the Holder via the threaded connections to the Working Electrode (WE) and Counter Electrode (CE). Place the Booster's connectors between the copper washers, and lock the connectors in place with the nuts. Use the M8 wrench (spanner) supplied with your 30k Booster to loosen and tighten the nuts.



Heat-generation During Use

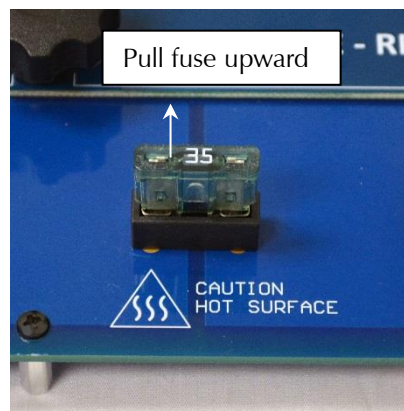
The battery, the area around the fuse, the fuse itself, and the battery holder can warm up, depending on the applied current.

Fuse

A 35 A fast-acting ATC blade fuse for automotive and low-voltage control circuits is mounted in the circuit with the Pouch Cell Holder. Gamry Instruments' potentiostats and accessories are normally well-protected, and the fuse does limit the current flow in case the battery gets shorted. However, the fuse or other protection mechanisms cannot prevent batteries from catching fire or exploding. Smaller batteries have only a low current rating, and can easily burst. The fuse does not help prevent damage in this case.

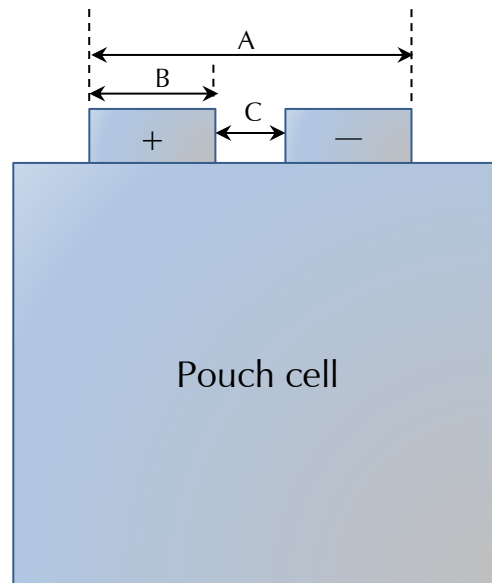
If the fuse blows, remove the fuse by gently pulling it upward out of the socket.

A spare fuse is included with the Pouch Cell Holder. The fuse is a typical automobile type, and can be found in many shops that sell car parts.



Specifications

Width × Length × Height:	243 mm × 300 mm × 36 mm (9.57" × 11.8" × 1.4")
Weight:	250 g (0.55 lbs.)
Maximum current rating:	30 A
Maximum operational temperature:	80°C (176°F)
Area of support surface: Width × Length	231 mm × 229 mm (9.10" × 9.02") You may use larger batteries which protrude beyond the platform, but you may need extra support if the battery does not lie flat on the platform.
Gold-plated contact area per electrode: Width × Length	100 mm × 20 mm (3.93" × 0.78")
Maximum electrode thickness for battery electrodes:	2 mm (0.08")
Maximum width for both electrodes together (A):	210 mm (8.26")
Maximum width for one electrode (B):	100 mm (3.93")
Minimum gap between electrodes (C):	10 mm (0.39")
Relative Humidity:	90% (non-condensing)
Storage and Shipping Temperature:	-40 to 75°C
Maximum Shipping acceleration:	30 G
Fuse	35 A Eaton BK/ATC-35, 32 V maximum



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