

ProtoBox-1593P Kit (PCB+Box)



A Hammond 1593P handheld plastic enclosure with battery compartment, packaged with a matching BPS ProtoBoard 2-hole per strip PCB.



BusBoard Prototype Systems - Built for designers

www.BusBoard.com sales@busboard.com

BPS-MAR-(KIT-1593P)-001 Rev 4.00

Hammond Battery Holders (Sold Separately by Hammond)

Hammond Part #	Battery Holder Kit	Battery Holder Kit Includes
BH1AAW Single AA Battery		<ul style="list-style-type: none"> • Battery holder for one AA battery • Wire leads • Double sided tape backing • Battery NOT included
BH2AAW Double AA Batteries		<ul style="list-style-type: none"> • Battery holder for two AA batteries • Wire leads • Foam with adhesive tape on one side • Divider for 1599 series - NOT included • Battery NOT included
BH1AAAW Single AAA Battery		<ul style="list-style-type: none"> • Battery holder for one AAA battery • Wire leads • Double sided tape backing • Battery NOT included
BH2AAAW Double AAA Batteries		<ul style="list-style-type: none"> • Battery holder for two AAA batteries • Wire leads • Double sided tape backing • Batteries NOT included
BH3AAAW Triple AAA Batteries		<ul style="list-style-type: none"> • Battery holder for three AAA batteries • Wire leads • Double sided tape backing (two strips) • Batteries NOT included
BH4AAAW Quad AAA Batteries		<ul style="list-style-type: none"> • Battery holder for four AAA batteries • Wire leads • Foam with adhesive tape on one side • Divider for 1599 series - NOT included • Batteries NOT included
BS61 Single 9 Volt Battery		<ul style="list-style-type: none"> • Battery holder for one 9V battery • Wire leads • Foam with adhesive tape on one side • Dividers for 1599 series - NOT included • Battery NOT included

A prototyping board designed for the Hammond 1593P handheld enclosure with battery compartment.

Features

ProtoBoard saves time! The PCB is designed specifically for the Hammond 1593P box. No cutting is required. The mounting holes are present in the right spots.

The convenient 2-hole ProtoBoard pattern provides an easy way to connect parts while maximizing usable board area.

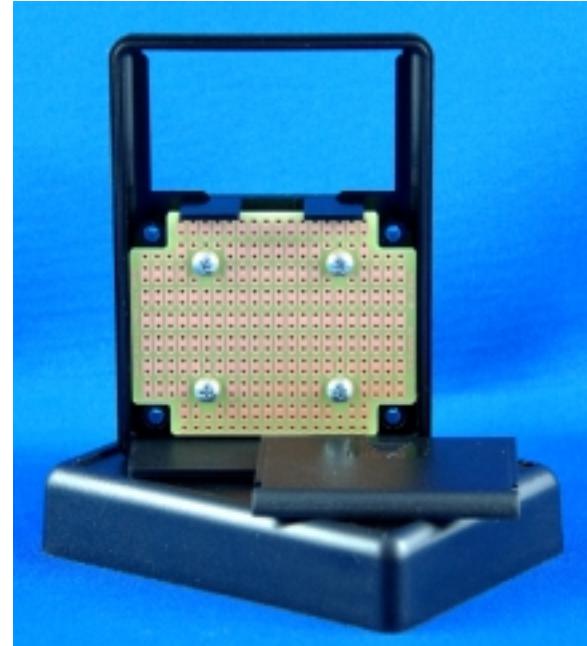
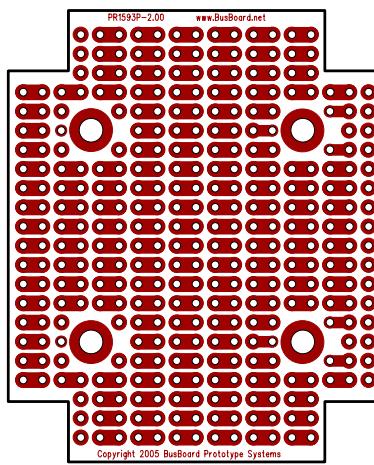
Lead free etched copper PCB with an anti-tarnish coating for easy soldering.

PCB Specifications

- High-quality FR4 glass epoxy board.
- Four 0.125" (1/8") mounting holes.
- Four 4-40 PCB mounting screws provided.
- Single sided, 1oz/ft² copper PCB
- 0.042" holes drilled on 0.1" centers
- PCB Size 1.9 x 2.4 in. (49 x 60mm)

Order Part# PR1593P (for PCB only)

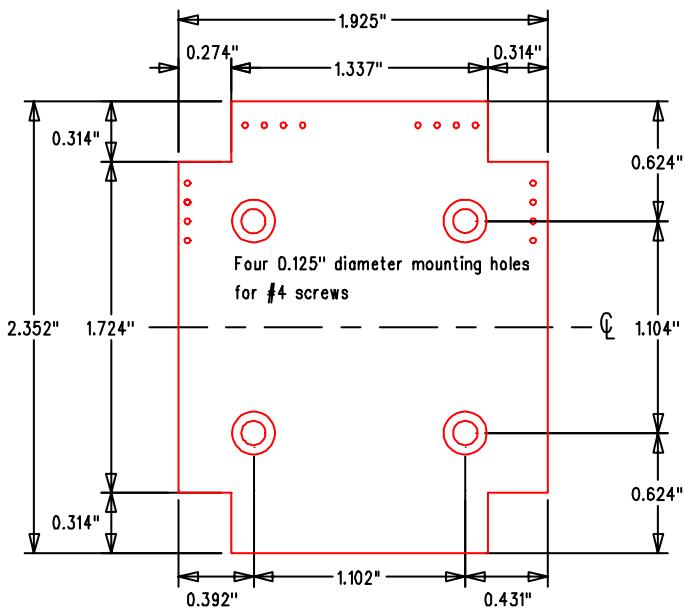
Board Layout (actual size)



PR1593P Prototyping Board shown with the Hammond 1593PBK box (box not included).

**To purchase the PCB + Box together,
order BPS part# KIT-1593P-BK**

PCB Mechanical Dimensions



1. PCB is symmetrical along the centerline.
2. All solder pads are located on a 0.100" grid.
3. The mounting holes are NOT located on the 0.100" grid.

PCB Design Copyright 2005 BusBoard Prototype Systems Ltd.

Hammond 1593P Hand Held Case Features

Note: The box is **NOT** included with BPS part# PR1593P.

The box is included with part# KIT-1593P-BK.

Hand-held electronic instrument enclosure.

Built-in PCB standoffs.

1 removable end panel (included).

Battery compartment for 1xAA, 2xAA, 1 to 4 AAA, or 1x9V battery (battery connector or holder not included). Long life "three snap" battery door.

Recessed top for membrane overlay or keypad.

Lap joint construction provides protection against dust.

Black, gray, or blue general purpose ABS plastic.

Secured with self tapping screws (included).

Box Size 3.6 x 2.6 x 1.1 inches (92 x 66 x 28 mm)

To order the box by itself order Hammond part# 1593PBK (black), 1593PGY (gray) or 1593PTBU (translucent blue)

See <http://www.hammondmfg.com/dwg8.htm>
<http://www.hammondmfg.com/dwg8TBU.htm>



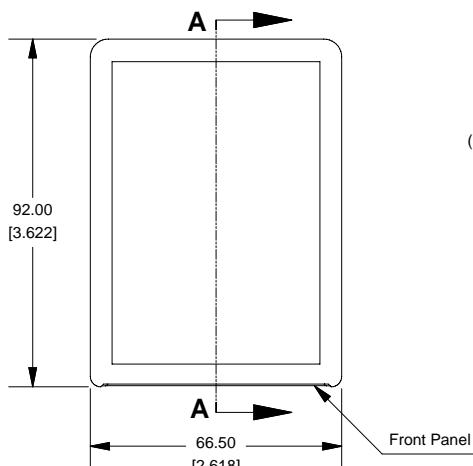
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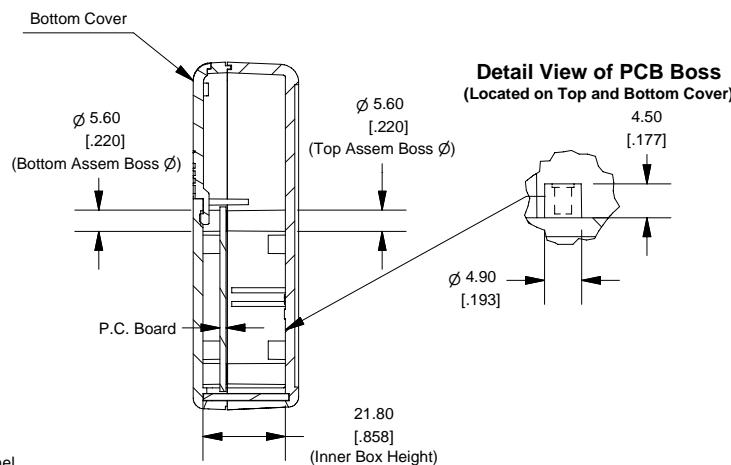
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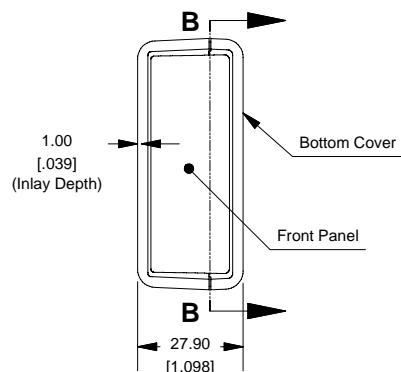
Top View of Assembly



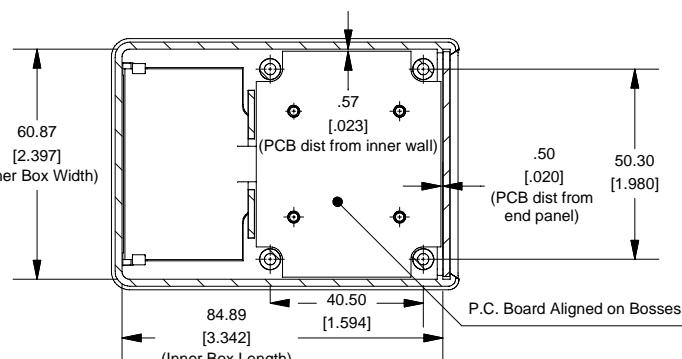
SECTION A-A (Side View Inside Assembly)



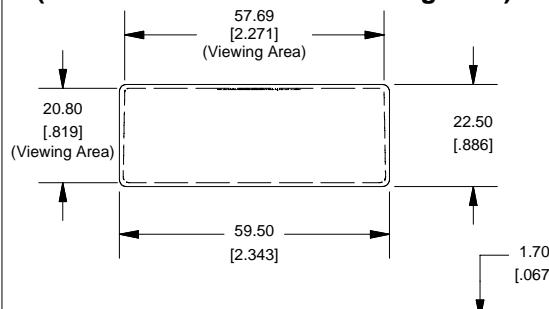
End View of Assembly



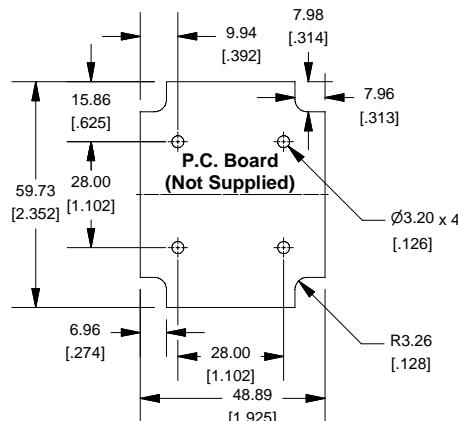
SECTION B-B (Inside of Bottom Cover)



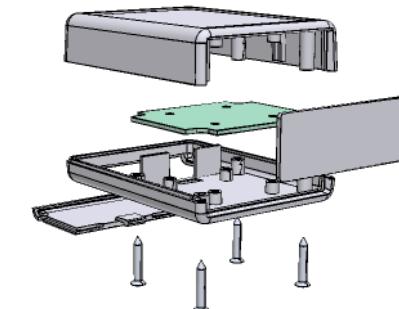
Front/Rear Panel (Dashed Line Indicates Viewing Area)



Maximum P.C. Board Size



Hand Held Instrument (1593P)



Enclosures can be Factory Modified (Milling, Drilling, Printing etc.)
Solid models of this enclosure available in STEP or IGES.
Contact Factory mjm@hammondmfg.com

NOTE	
Enclosure molded from GP ABS (UL94-HB) plastic.	
Purchased assembly includes top and bottom cover, front panel (plastic), battery door and 4 cover screws.	

PART NUMBERS

1593P Enclosure

Black Enclosure	1593PBK
Grey Enclosure	1593PGY

ACCESSORIES

Cover Screws (Pkg 100) [#4 x 3/4" self-tapping oval head (19.1mm)]	1593QS100 (Silver) 1593QS100BK (Black)
P.C. Board Screws [#4 x 1/4" self-tapping (6.4mm)]	1593ATS50 (Pkg 50) 1593ATS100 (Pkg 100)
Belt or Pocket Clip	1599CLIP (Black) 1599CLIPGY (Grey)
Infrared Panels (Pkg 10)	1593DIR10



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1593P

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