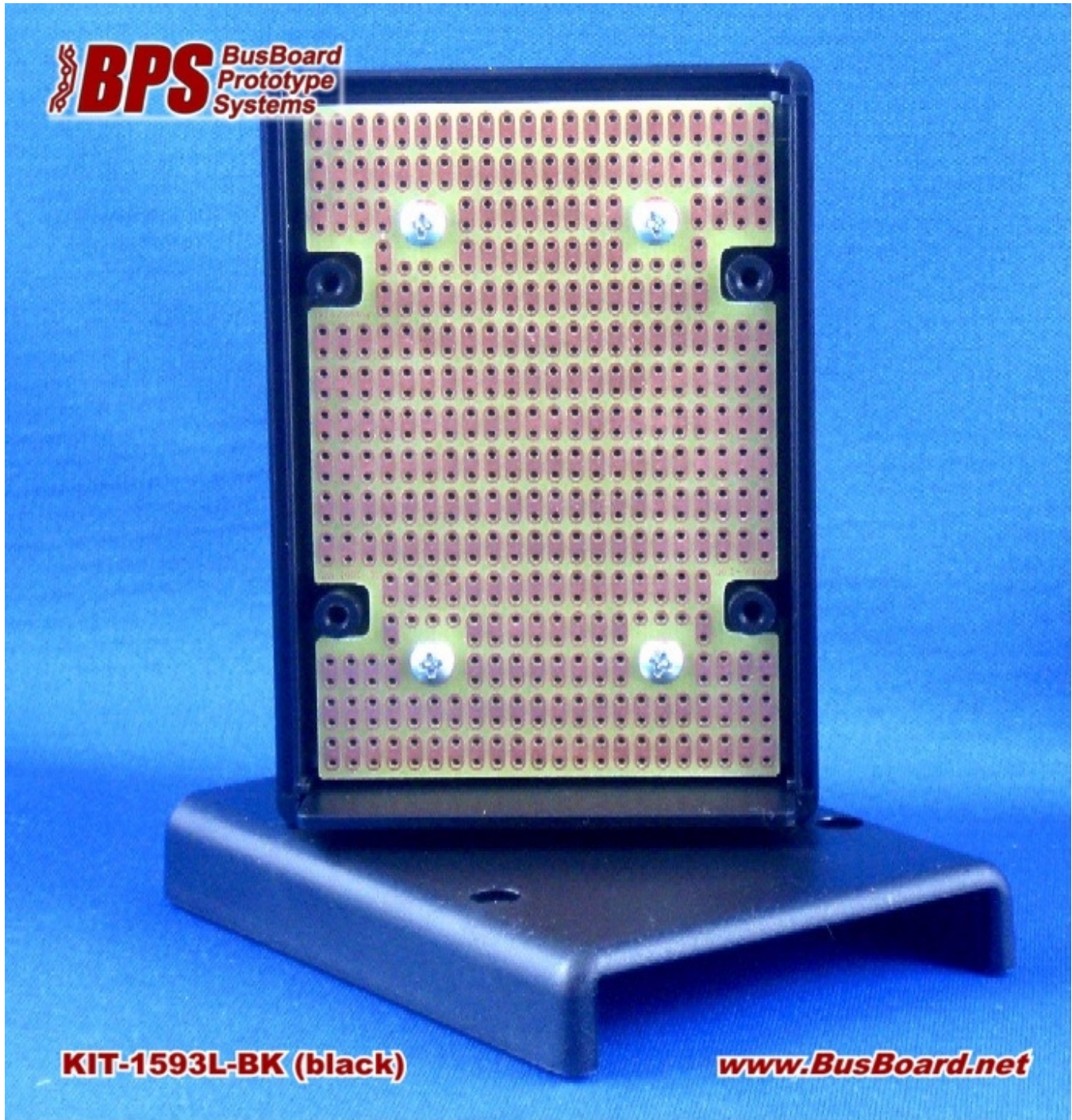


ProtoBox-1593L Kit (PCB+Box)



A Hammond 1593L handheld plastic enclosure 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-1593L)-001 Rev 4.00

A prototyping board designed for the Hammond 1593L handheld enclosure.

Features

ProtoBoard saves time! The PCB is designed specifically for the Hammond 1593L 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.

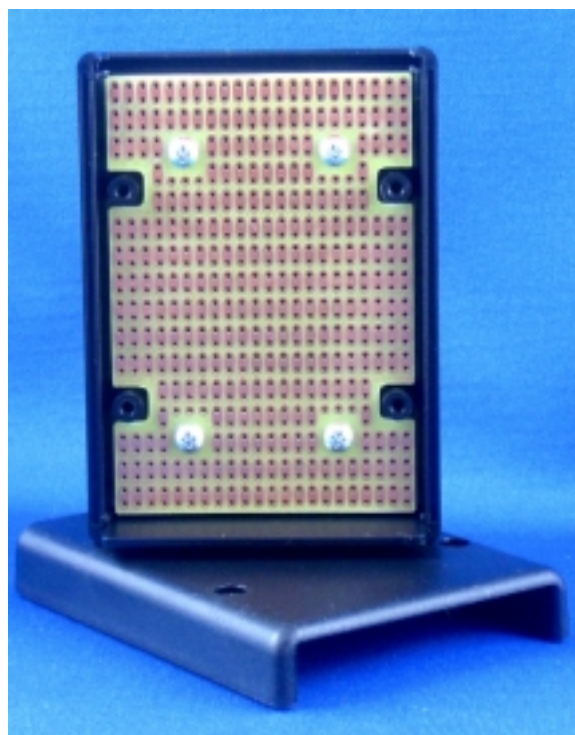
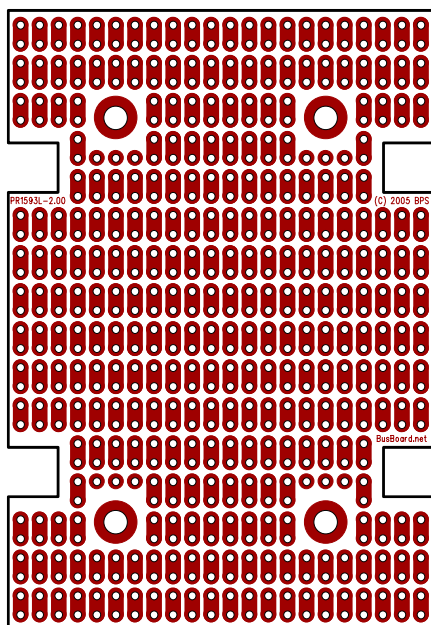
Lead free etched copper PCB with an anti-tarnish coating for easy soldering.

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 3.3 x 2.3 in. (83 x 58mm)

Order Part# PR1593L (for PCB only)

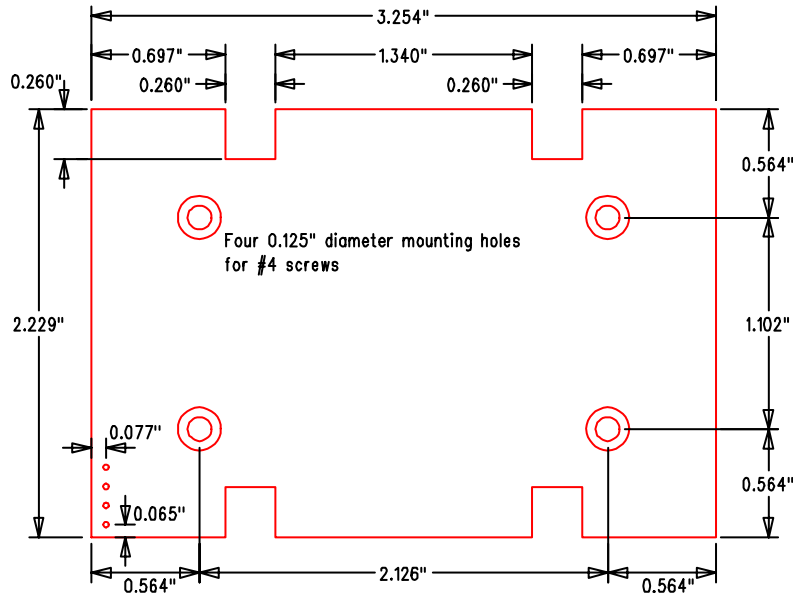
Board Layout (actual size)



PR1593L Prototyping Board shown with the Hammond 1593LBK box (box not included).

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

PCB Mechanical Dimensions



1. PCB is symmetrical in the X and Y directions.
 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 1593L Hand Held Case Features

Note: The box is **NOT** included with BPS part# PR1593L.

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

Hand-held electronic instrument enclosure.

Built-in PCB standoffs.

2 removable end panels. 2 different styles included, flat and rounded.

Recessed top for membrane overlay or keypad.

Lap joint construction provides protection against dust accumulation and splashing water.

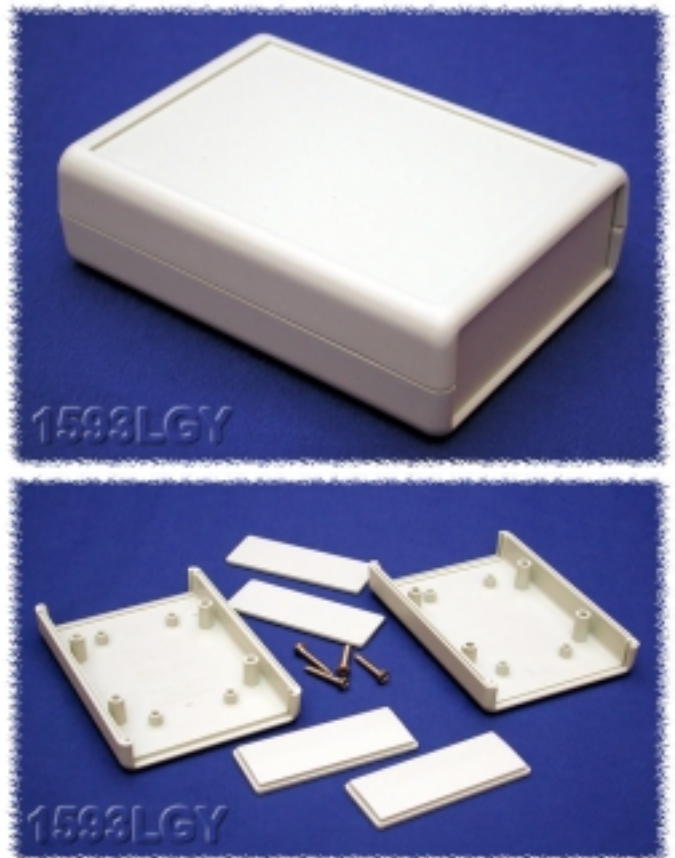
Black, gray, or blue general purpose ABS plastic.

Secured with self tapping screws (included).

Box Size 2.6 x 2.6 x 1.1 in. (66 x 66 x 28 mm)

To order the box by itself order Hammond part# 1593LBK (black), 1593LGY (gray) or 1593LTBU (translucent blue)

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



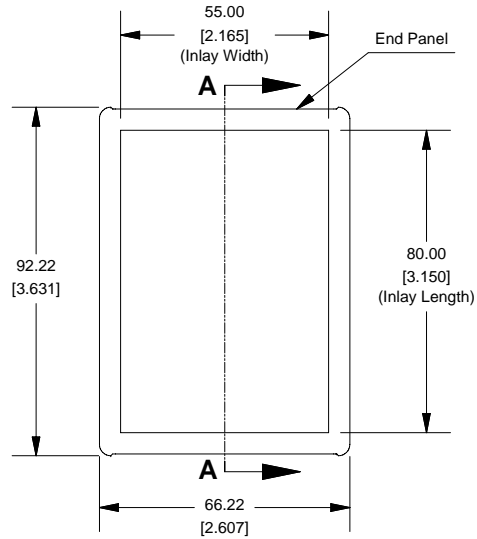
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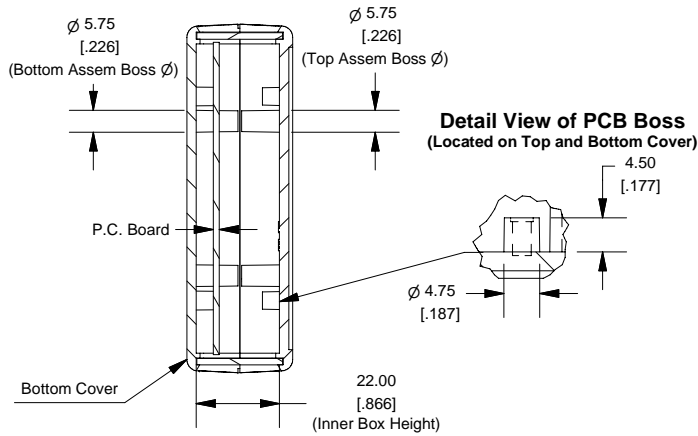
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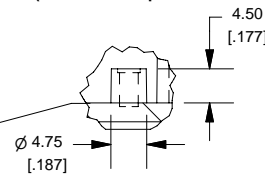
Top View of Assembly



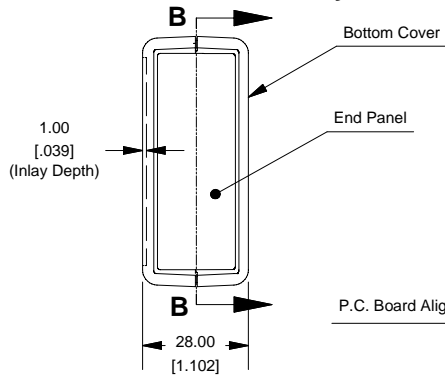
**SECTION A-A
(Side View Inside Assembly)**



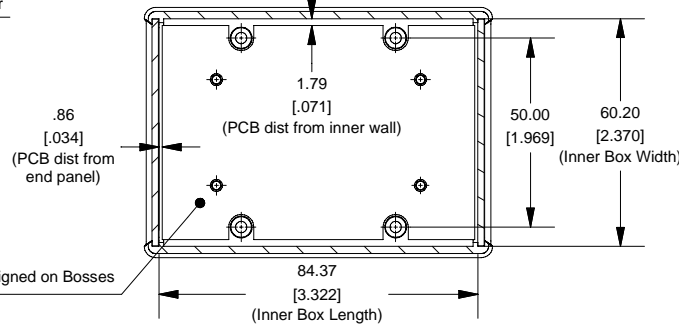
**Detail View of PCB Boss
(Located on Top and Bottom Cover)**



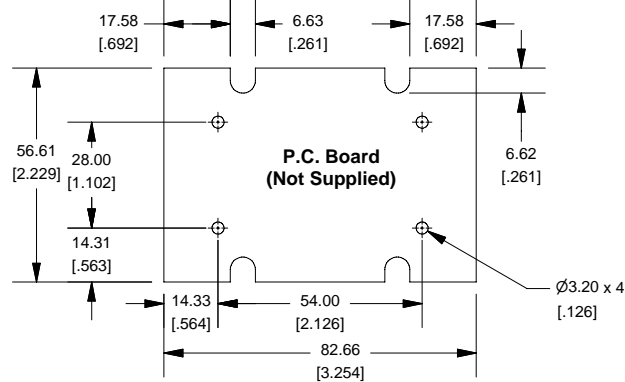
End View of Assembly



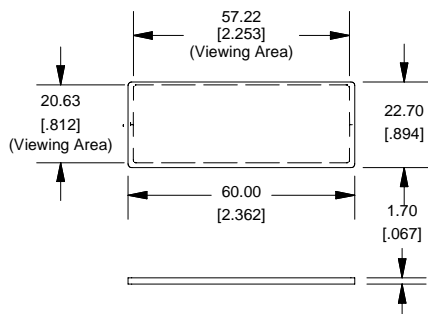
**SECTION B-B
(Inside of Bottom Cover)**



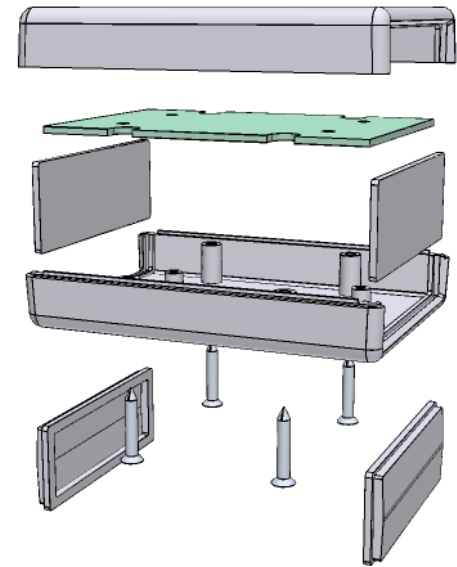
Maximum P.C. Board Size



**Front/Rear Panel
(Dashed Line Indicates Viewing Area)**



Hand Held Instrument (1593L)



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 and rear plastic panels (2 types - flat and contoured) and 4 cover screws.	

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