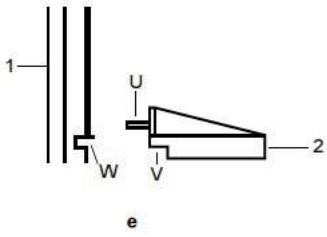
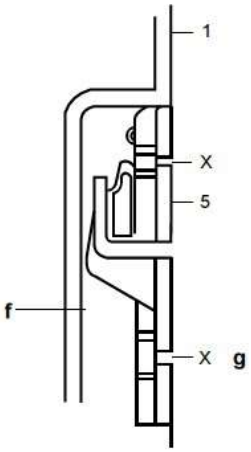
CLIFF

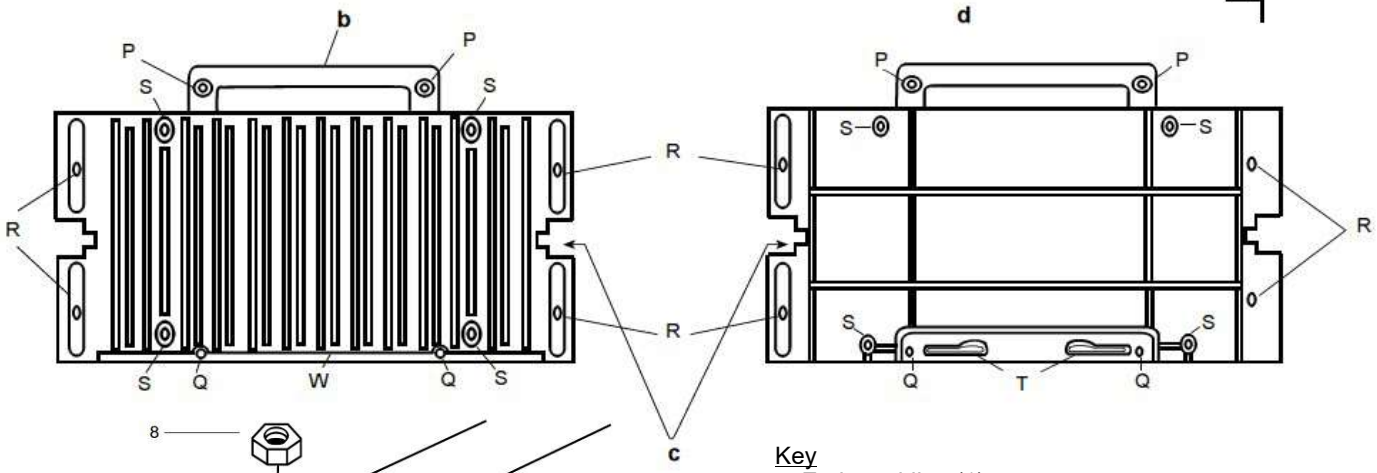
STACK RACK PC01C

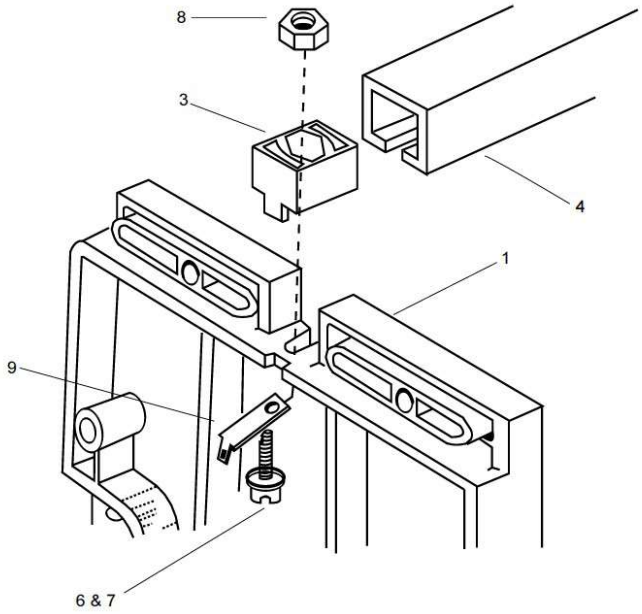
The PC-01C Stack Rack is designed to hold PC boards during all stages of assembly, cleaning and testing. The width of the rack module is easily adjusted from zero to 290 mm by sliding one side panel along the aluminium extrusion and tightening two screws. One meter lengths of extrusion are available to allow construction of racks up to 970 mm wide. The module is stackable in all directions so that racks of unlimited height and depth may be constructed. The side panels are made from conductive plastic for use when highly sensitive integrated circuits need protection against anti-static charges throughout all handling, up to soak test or burn-in.

CL18875 - PC01C conductive rack









Key
a. End moulding (1)
b. board slot face
c. Handle
d. Extrusion slot
e. Rear face
f. End view (with board retainer)
g. Handle recess
h. Engagement of wall mounting bracket with end moulding

Kit Contents
2 x End mouldings (carbon loaded polypropylene)
4 x PCB retainers (ABS)
4 x Nut holders (ABS)
2 x Spacer rails (extruded aluminium)
2 x Wall mounting brackets (ABS)
10 x M4x16 cheesehead steel screw
4 x M4 washers
10 x M4 nuts
2 x Spade terminals 0.187in (4.75mm)

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✓RoHS

Assembly Instructions

Initial Assembly

Refer to figures 1 & 2 before proceeding. Note that the references assigned to each component correspond to those used in the contents list above. If assembling more than one fit with the object of increasing height or depth, refer first to the section headed 'Stacking'

1. Place a nut (8) into the hexagonal recess in a nut holder (3)
2. Fit a washer (7) to a screw (6).
3. Place the nut holder into a groove in an end moulding (1) so that the tab on the nut holder engages in the slot.
4. Insert the screw through the elongated slot in the end moulding, engage with the nut and start tightening (it will be necessary to prevent the nut coming out of its holder while tightening the screw). Continue tightening the screw until the nut holder is restricted to about 2mm of vertical movement in the groove.
5. Repeat 1-4 for the remaining 3 nut holders. The spade terminals (9) may be fitted under the heads of two screws if required.
6. Slide the open end of a spacer rail (4) over one of the nut holders, until flush with the outside edge of the end moulding. Tighten the screw to retain the spacer rail. Repeat with the second spacer rail over the other nut holder on the same end moulding.
7. Slide the nut holders on the second end moulding into the open ends of the two spacer rails, ensuring that the pcb slots in the end moulding face each other. Set to the required distance between the end mouldings corresponding to the width of the pcb's to be handled, and tighten the remaining two screws.
8. Refer to figure 2 and fit one pcb retainer (2) to each end moulding. Note that the spigots (U) and ledge (V) on the pcb retainers engage with holes (Q) and slot (W) respectively in the end mouldings.

Application recommendations

If the rack is to be used for more than one size of pcb, fully tighten the screws at one end only, and leave those at the other end sufficiently loose to permit the end moulding to move under firm pressure.
When the rack is set for continuous use with one size of pcb, the excess length of the spacer rails may be sawn off, and the wall mounting brackets (5) may be utilised if required.
If a rack is to be used for pcb's fitted with static sensitive computers e.g. MOS devices , the rack should be electrically connected to the appropriate ground reference point via the spade terminal provided and a suitable length of wire.

Wall mounting

Note that when the wall mounting brackets are used, the pcb's will be held horizontally and the hook on the wall mounting bracket engages with the upper projection (T) on the end moulding. Four slots (X) are provided in each wall mounting bracket to accept retaining screws. Ensure that the brackets are solidly screwed to the wall. No.6 roundhead wood screws are recommended.

Transportation

If a loaded rack is likely to be inverted, transported by road, or subjected to any sort of treatment which could result in pcb's falling out of the rack, then the pcb's may be retained by fitting the spare pair of pcb retainers (2) to the handles of the end moulding; the spigots of the retainers being inserted into holes (P) in the end moulding, with the flat face of the retainer downwards.
Always carry loaded racks by the handles only.

Stacking (General)

Racks may be screwed together to increase height, width or depth.
When increasing the width of an assembly, the relative widths of the two racks is immaterial, and already assembled racks may be screwed together without dismantling. However, when increasing the height or depth of an assembly, it is necessary to first remove the spacer rails.
Use the spare screws and nuts from the rack kits to screw the mouldings together. Washers should not be used. Tighten the screws evenly but do not over-tighten. Refer to figure 2.
If increasing height or depth of existing racks, first slacken, but do not remove, the screws (6) figure 1 and remove the spacer rails. Follow the appropriate instructions below, then proceed to paragraph 1 under the heading 'Initial assembly'

To increase width

Ensure that the spacer rails do not protrude beyond the mating (outer) edges of the mouldings. Place the mating faces side by side. Note that, of the four holes (S), two are provided with spigots and two with matching recesses. When correctly mated, with each spigot in the opposing recess, screw the end moulding together through holes (S). Note that the nuts are held against rotation by the opposing hexagonal recesses. (Since the hexagonal recesses are provided in the holes (S), there is no preferred direction for fitting the screws).

To increase height

Engage the handle of one end moulding into the handle recess of the second end moulding, ensuring that the pcb retaining slots are both on the same side of the resultant sub-assembly. Screw the two mouldings together by passing the screws (6) through the holes (Q) on the pcb slot side of the upper moulding, the nuts being held against rotation by hexagonal recesses in the outer side of the lower moulding. Repeat for the other pair of mouldings.

To increase depth

Engage the oval projections surrounding holes (R) on one end moulding into the matching recesses in the second end moulding. Screw the mouldings together by passing the screws through holes (R) in the pcb slot side of the mouldings, the nuts being held against rotation by hexagonal recesses in the outer side of the mouldings. Repeat for the other pair of mouldings.