Installation Instructions

Kit P/N: 119-1791 119-1792 119-1793
119-1794 119-1795 119-1796
119-1797 119-1798 119-1799
Kit Contents

(2) Frames
(4) Posts

Assembly Hardware Kit:
(32) 10-32 x .375" Flat Head Screws

Mounting Hardware Kit:
(4) .25" Hex lag Screws
(4) .281 Flat Washers

Rack Mount Hardware Kit:
(20) 12-24 x .500" Pan Head Screws
(20) 12-24 Cage Nuts

Assembly Instructions

Step 1. Align Post: Set one Frame on a flat surface. Take one Post and align the single Horizontal Lance in the corner of the Frame with the Horizontal Slot on the Post. Insert the Lance into the Slot, and slide the Post outward until the two Vertical Lances are inserted in the Vertical Slots.

Step 2. Secure Post: Using (4) flat head screws, secure the Post to the Frame. Install the screws on the side with the two Vertical Lances first to pull the Post into alignment. To ensure proper screw engagement, use a hand screwdriver. Do not start screws with a drill. Do not fully tighten the screws yet.
Step 3. **Complete Assembly:** Set the assembly on its side with the Post laying on a flat surface. Place the second Frame at the other end of the Post, aligned in the same direction as the first Frame. Using the same process as in Step 1, slide the Lances into the Slots, and secure with flat head screws. Repeat Steps 1-3 until all (4) Posts are installed. **Tighten all screws once the rack is fully assembled.**

![Diagram of assembly](image)

Step 4. **Mounting:** Refer to the appropriate mounting instructions below.

<table>
<thead>
<tr>
<th>Instructions</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>General Mounting Instructions</td>
<td>4</td>
</tr>
<tr>
<td>Mounting Into Wood Studs</td>
<td>5</td>
</tr>
<tr>
<td>Mounting to Drywall (Wood or Metal Studs)</td>
<td>6</td>
</tr>
<tr>
<td>Floor and Desktop Locations</td>
<td>8</td>
</tr>
<tr>
<td>Maximum Weight Capacity</td>
<td>8</td>
</tr>
</tbody>
</table>
General Mounting Instructions

Determine Location and Orientation: The mounting location should take into account access, cable routing, and airflow. This rack system should be mounted vertically, with any of the 4 faces against the wall as shown.

Be sure to take into account the space required for installing and removing equipment.

Note: For wall types not mentioned below, contact a professional engineer for mounting recommendations.

Key-hole Locations
Mount Into Wood Studs

Step 1. **Mark location of Rack:** Ensure that the wood studs are on 16” Centers. Locate the center of the studs. Mark a location on the wall at the center of one stud so that the rack will be at the desired height. Mark another location 16” horizontal from the first mark ensuring that both marks are level and are at the center of each stud.

Step 2. **Installing upper lag bolts:** Using a 3/16” drill bit, drill holes at least 2.25” deep in the locations marked on the wall. Ensure that the holes are being drilled into the center of the stud. Install the supplied (2) Lag Bolts and (2) Washers into the holes leaving about 1/2” of thread exposed. Hang the rack onto the Lag Bolts through the Upper Key-Holes.

Caution: All Lag Bolts must be installed into the center of the wood studs in order to support the maximum weight.

Step 3. **Installing lower lag bolts:** With the rack flush against the wall, mark locations 1/8” below the top of the Lower Key-Holes. Remove the rack from the wall. Using a 3/16” drill bit, drill holes at least 2.25” deep in the locations marked on the wall. Hang the rack back onto the top Lag Bolts. Install the supplied (2) Lag Bolts and (2) Washers through the Lower Key-Holes. Firmly tighten all Lag Bolts against the rack.

Caution: All Lag Bolts must be installed into the center of the wood studs in order to support the maximum weight.
Mounting to Drywall (Wood or Metal Studs)

Step 1. **Determine plywood dimension:** Mounting to drywall or metal studs requires the installation of a 3/4" thick sheet of plywood. The plywood sheet should be wide enough so that it may be attached to at least 3 studs. There will be at least 12" of plywood above and greater than 1" below the rack when mounted.

Step 2. **Plywood Preparation:** Place appropriate construction adhesive in 16 circular beads, as shown, on the side of the plywood to be placed against the wall. Place the plywood on the wall so that the rack will be centered on the plywood and in the desired location when installed.

Step 3. **Securing Plywood:** See the figure on the next page. Using 2-1/2" drywall screws, secure the plywood to the studs in the following configuration: 15 screws through the studs at the top (5 on each stud spaced 4” apart, starting 11” above where the top of the rack will be when mounted) and 3 screws through the studs at the bottom (1 on each stud at 1” from the bottom of the plywood). Allow construction adhesive to set per manufacturer’s instructions before mounting the rack.

**Caution:** Three studs must be used to mount the plywood in order to support the maximum weight.
Step 4. **Installing Upper Lag Bolts:** Mark a location on the plywood so that the rack will be at the desired position. Mark another location 16" from the first mark ensuring that the two marks are level. Using a 3/16" drill bit, drill holes through the plywood in the marked locations. Install the supplied (2) Lag Bolts and (2) Washers into the holes, leaving about 1/2" of thread exposed. Hang the rack onto the Lag Bolts through the Upper Key-Holes.

Step 5. **Installing Lower Lag Bolts:** With the rack flush against the plywood, mark locations 1/8" below the top of the Lower Key-Holes. Remove the rack from the plywood. Using a 3/16" drill bit, drill holes through the plywood in the marked locations. Hang the rack back onto the Top Lag Bolts. Install the supplied (2) Lag Bolts and (2) Washers through the Lower Key-Holes. Firmly tighten all Lag Bolts against the rack.
Floor and Desktop Locations

Step 1. **Screw Removal:** Remove 1 screw from each corner of the desired surface to be placed on the floor or desktop.

Step 2. **Rubber feet installation:** Install the supplied (4) Rubber Feet using the supplied (4) Pan Head Screws. Once the screw head is pulled down into the Rubber Foot, the foot will start turning. Keep tightening until the Rubber Foot stops turning.

Caution: Since the rack is not secured to desk or floor, do not pull servers or other equipment out of the rack and leave unsupported, as this may cause the rack to tip over.

**Maximum Weight Capacity**

Refer to the table below for the maximum weight capacity of each rack. Rack Size refers to the height for wall mount racks and vertical height for desktop racks.

<table>
<thead>
<tr>
<th>Rack Size</th>
<th>Maximum Weight Capacity</th>
</tr>
</thead>
<tbody>
<tr>
<td>12U</td>
<td>300 lbs.</td>
</tr>
<tr>
<td>15U</td>
<td>400 lbs.</td>
</tr>
<tr>
<td>21U</td>
<td>400 lbs.</td>
</tr>
</tbody>
</table>

Warranty Statement
Innovation First, Inc. warrants our products against defects in material and workmanship for a period of one (1) year from the date of purchase. Innovation First, Inc. liability shall be limited to repairing or replacing, at our option, any defective product.