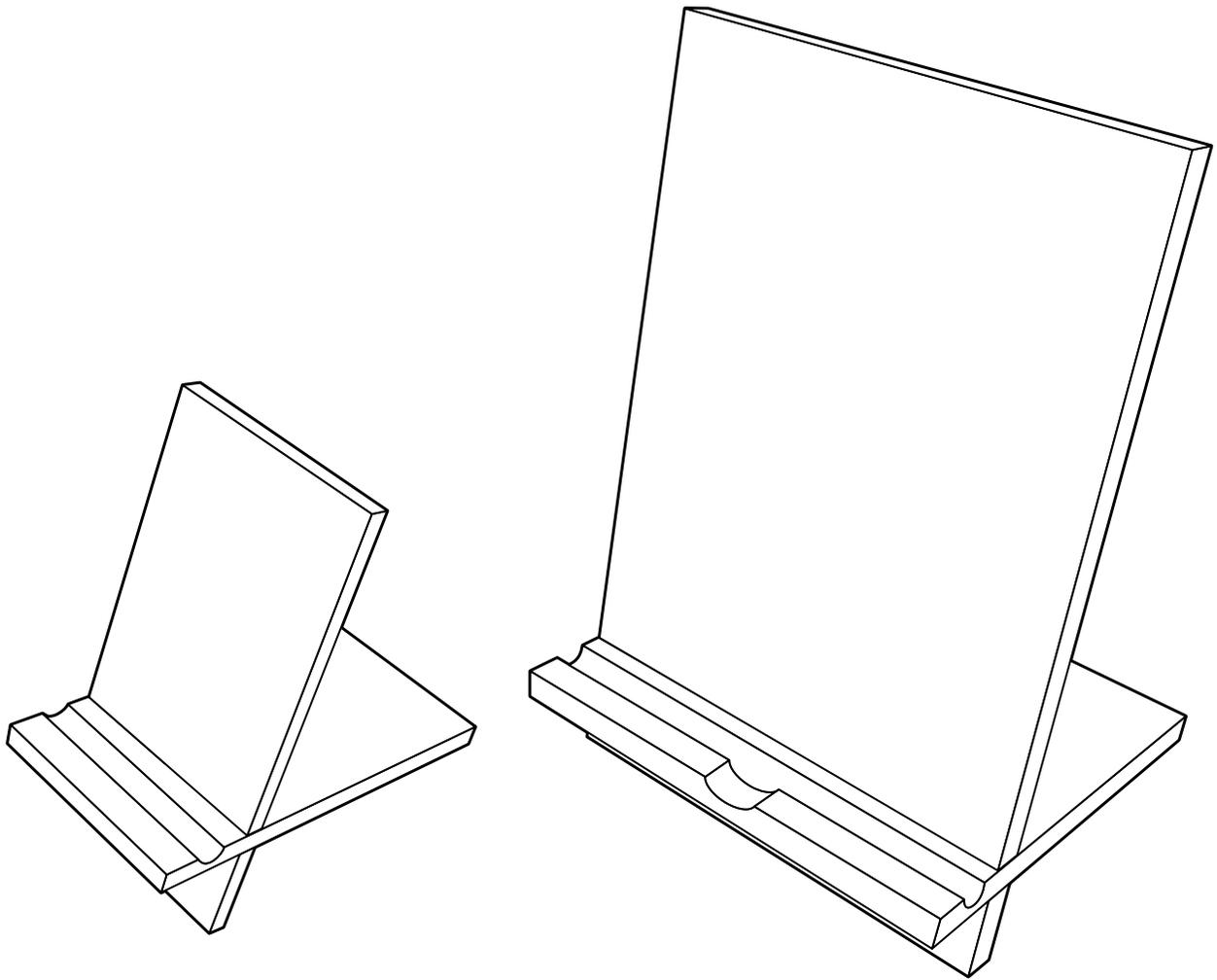




**WOODWORKS: BEGINNER PROJECT 2013-2014**  
**TABLET/SMART PHONE STAND**



It seems just about everyone nowadays owns a smartphone or tablet. Now you can create a very cool holder to store yours when it's not in use, or if it's being charged. And, maybe, it won't get lost around the house so easily. The simplicity of this project makes it ideal for beginning woodworkers, whether you keep the stand for yourself or give it as a great gift. Along with some simple layout work, you'll gain experience with a table saw, a band saw, a router, and some hand chiseling. And after you build it, you will learn more about applying stain and using finishes to protect the wood and keep it looking beautiful.

## TOOLS REQUIRED

### Hand Tools

- Chisel, 3/8" and 1/2" wide
- Adjustable square

### Power Tools

- Table saw
- Router table
- Band saw
- Drill with drum sander
- Orbital or finish sander

### Miscellaneous

- Tape measure
- Pencil
- Safety glasses
- 120- and 220-grit sandpaper
- Sanding block
- Clean, lint-free cloths
- Respirator
- Gloves for finishing
- Mineral spirits, for cleanup of oil-based finishes
- Good quality, natural-bristle brush (for oil-based finishes)

## SHOPPING LIST

**Recommended Wood:** Clear Pine

### Tablet Stand

Parts	Material	Quantity
A, B	1 × 10	2'

### Smart Phone Stand

Parts	Material	Quantity
C, D	1 × 4	1-1/2'

## CUTTING LIST

Tablet Stand			
Part	Name	Qty	Dimension
A	Back	1	½" × 8" × 12"
B	Base	1	½" × 8" × 7½"

Smart Phone Stand			
Part	Name	Qty	Dimension
C	Back	1	¾" × 3½" × 7"
D	Base	1	¾" × 3½" × 7"

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## WOOD FINISHING PRODUCTS

### Recommended Finish

Prep: Minwax® Pre-Stain Wood Conditioner (oil-based)  
 Stain: Minwax® Gel Stain, Hickory  
 Finish: Minwax® Wipe-On Poly, Gloss

### Alternate Finish

Stain: Minwax® Express Color, Indigo  
 Finish: Minwax® Express Clear, High Gloss

## BEFORE YOU BEGIN

Good craftsmanship begins and ends with good work habits, so make the following steps part of your routine workshop practice. If you have any doubts or questions about how to proceed with a project, always discuss them with your shop instructor.

- Carefully and fully review plans and instructions before putting a tool to the project lumber.
- Work sensibly and safely. Wear safety goggles. Wear the appropriate respirator whenever making sawdust or working with thinners or other solvents.
- At the end of every work session, clean up your shop area and put away all portable tools.

## CUTTING AND ASSEMBLY

### Tablet Stand

**A1.** Plane stock to thickness.

**A2.** Cut parts A and B to their finished size (see Fig. 1).

**A3.** Set up a 1/2" core box bit in the router table. Position the fence 7/8" from the face of the fence to the center of the bit. Set the bit height for 1/8".

**A4.** Make one pass across the width of the base (B) (see Fig. 2).

**Woodworker's Tip:** Use a backer board so the router bit doesn't chip the wood on the exit side.

**A5.** Increase depth of cut to 3/16" and make a second pass.

**Woodworker's Tip:** It's better to rout in two light passes instead of one heavy pass. This will prevent tearout and result in a better surface finish.

**A6.** Mark and square a line 1-1/2" from the end of each piece. On the base piece (B), be sure you're marking from the end near the groove made in the previous steps (see Fig. 3).

**A7.** Position the mating piece on the pencil line and carefully trace its thickness. Make sure your pencil is very sharp so you get a fine line.

**Woodworker's Tip:** Keep a piece of fine, 220-grit paper near you on the bench. Drag the tip of your pencil across it periodically to keep the point sharp.

**A8.** Mark the center of the width of each board.

**A9.** Cut on the waste side, the inside, of the two lines you made. You can do this by hand or by using a band saw equipped with a miter gauge. Stop at the center point.

**A10.** Use a chisel to remove the remainder of the waste. Do not chop it all out at once. Do this in small bites, nibbling your way back to the center line.

**A11.** Slide the two pieces together to check the fit. If it's too tight, use a file to slightly widen the slot on one of the pieces.

**A12.** Carefully sand the project parts. Use a 1/2" drum sander, hand held, or wrap sandpaper around a 1/2" dowel to sand the recess in the base (see Fig. 4).

**A13.** Create a finger recess in the base by marking out an area 1" wide centered on the width of the base. Then use a drum sander in a hand-held drill to create the finger recess (see Fig. 5).

**A14.** After staining and finishing, it will be ready for immediate use by simply slipping the two pieces together at the cutouts.

### Smart Phone Stand

**B1.** Plane stock to thickness.

**B2.** Cut parts C and D to their finished sizes (see Fig. 1).

**B3.** Using the router table set up as described above in steps A3 to A5, rout the base (D).

**B4.** Mark and cut the halving joint as described above in steps A6 to A10.

**B5.** Slide the two pieces together to check the fit. If it's too tight, use a file to slightly widen the slot on one of the pieces.

**B6.** Carefully sand the project parts. Use a 1/2" drum sander, hand held, or wrap sandpaper around a 1/2" dowel to sand the recess in the base (see Fig. 4).

**B7.** After staining and finishing, it will be ready for immediate use by simply slipping the two pieces together at the cutouts.

## STAINING AND FINISHING

**Woodworker's Tip:** Though you may be tempted to cut short your sanding, preparation, and application time, don't do it. These tasks are very important steps in obtaining a high-quality finish. Remember, it is the finish, just as much as the fit and smoothness of the parts, that will have an impact on how people judge your craftsmanship. To ensure an excellent result, follow the steps listed in this section and the instructions the finish manufacturer puts on its products.

### FINISHING TIPS

- Test the stains and finishes you are planning to use on scraps of wood. On the back of the scrap, mark the stain/finish combination and the type of wood. Allow all samples to dry thoroughly before making your final finish selection. Save your samples for quick reference on future projects.
- All stains and finishes must be allowed to dry thoroughly between coats. Remember that drying times can vary due to temperature, humidity, and other climatic conditions.
- If you have some leftover stain or finish, wipe the can rim so that stain or finish in the rim won't dry out and prevent the lid from forming a tight seal.

### BEFORE YOU STAIN

Carefully sand the parts in the direction of the grain. Start with 120-grit paper and finish with 220-grit. Remove all the sanding dust. Then proceed with stain and finish of your choice.

### RECOMMENDED STAIN AND FINISH

1. Before using Minwax® Gel Stain, apply Minwax® Pre-Stain Wood Conditioner (oil-based), following the directions on the can. Applying a pre-stain conditioner will help to ensure even absorption of stain and prevent blotchiness.
2. Before use and occasionally during the application, stir Minwax® Gel Stain until creamy.
3. Evenly apply a liberal amount of the Minwax® Gel Stain with a brush or rag. Wait 3 minutes and, using a clean rag, wipe with the wood grain to remove the excess. Allow Gel Stain to dry for 8 to 10 hours. To darken the color, apply additional coats of Minwax® Gel Stain in the same manner. Allow the stain to dry for 24 hours before applying the finish.
4. Shake the Wipe-On Poly container thoroughly before use.
5. Put a liberal amount of Wipe-On Poly on a clean, soft, lint-free cloth and rub into the wood.
6. Allow to dry at least 2-3 hours. Sand entire surface lightly with very fine sandpaper (220-grit). Remove all sanding dust.
7. Apply a second coat in the same manner as the first. If a third coat is desired, repeat Step 6 before application.
8. Allow final coat to dry 24 hours before normal use.

### ALTERNATE STAIN AND FINISH

**Alt 1.** To apply the Minwax® Express Color, first shake the tube gently. Point the tube toward the wood surface and squeeze gently. Apply with a clean, lint-free cloth. Remove any excess by wiping lightly, in the direction of the wood grain, with a clean cloth. For a deeper color and sheen, wait 1 hour, then apply a second coat.

**Alt 2.** For extra durability without added color, wait 3 hours, then apply a coat of Minwax® Express Clear. Point the tube toward the wood surface and squeeze gently. Apply with a clean, lint-free cloth, in the direction of the wood grain. Wait overnight before subjecting the wood to normal use.

### PRODUCT SAFETY

For your safety and the safety of those you work with, always read and follow the safety warnings that manufacturers print on their labels.

**WARNING!** Removal of old paint by sanding, scraping, or other means may generate dust or fumes that contain lead. Exposure to lead dust or fumes may cause brain damage or other adverse health effects, especially in children or pregnant women. Controlling exposure to lead or other hazardous substances requires the use of proper protective equipment, such as properly fitted respirators (NIOSH approved) and proper containment and cleanup. For more information, call the National Lead Information Center at 1-800-424-LEAD (in U.S.) or contact your local health authority.

**DANGER:** Rags, steel wool, other waste soaked with oil-based stains and clear finishes, and sanding residue may spontaneously catch fire if improperly discarded. Immediately place rags, steel wool, other waste soaked with oil-based products, and sanding residue in a sealed, water-filled metal container. Dispose of in accordance with local fire regulations.

### When using oil-based wood finishing products:

#### CAUTIONS: CONTAINS ALIPHATIC HYDROCARBONS.

Contents are **COMBUSTIBLE**. Keep away from heat and open flame.

**VAPOR HARMFUL.** Use only with adequate ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air, wear respiratory protection (NIOSH approved), or leave the area. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage.

**FIRST AID:** In case of eye contact, flush thoroughly with large amounts of water for 15 minutes and get medical attention. For skin contact, wash thoroughly with soap and water. In case of respiratory difficulty, provide fresh air and call physician. If swallowed, call Poison Control Center, hospital emergency room, or physician immediately.

#### DELAYED EFFECTS FROM LONG-TERM OVEREXPOSURE.

Contains solvents, which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling contents may be harmful or fatal.

**WARNING:** This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

#### DO NOT TAKE INTERNALLY. KEEP OUT OF REACH OF CHILDREN.

CONFORMS TO ASTM D-4326. Contact a physician for more health information.

### When using water-based wood finishing products:

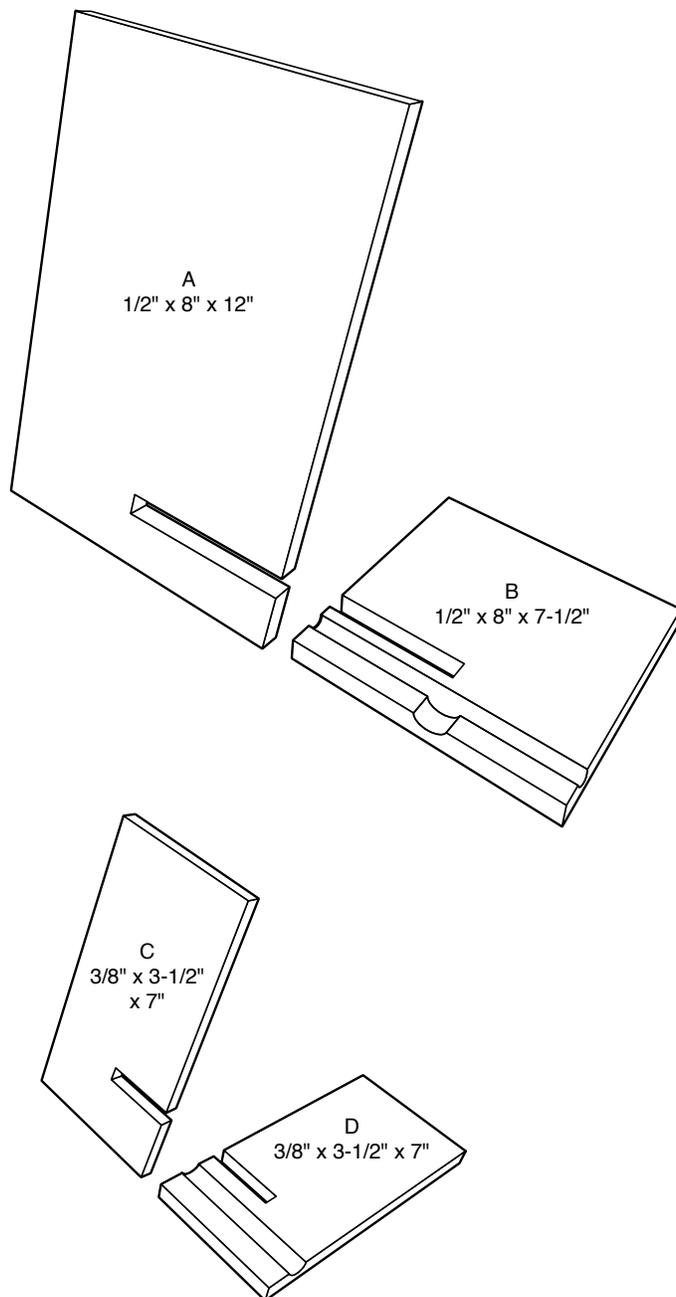
**CAUTIONS:** Use Only With Adequate Ventilation. To avoid overexposure, open windows and doors or use other means to ensure fresh air entry during application and drying. If you experience eye watering, headaches, or dizziness, increase fresh air or wear respiratory protection (NIOSH approved), or leave the area. Avoid contact with eyes and skin. Wash hands after using. Keep container closed when not in use. Do not transfer contents to other containers for storage.

**FIRST AID:** In case of eye contact, flush thoroughly with large amounts of water. Get medical attention if irritation persists. If swallowed, get medical attention immediately.

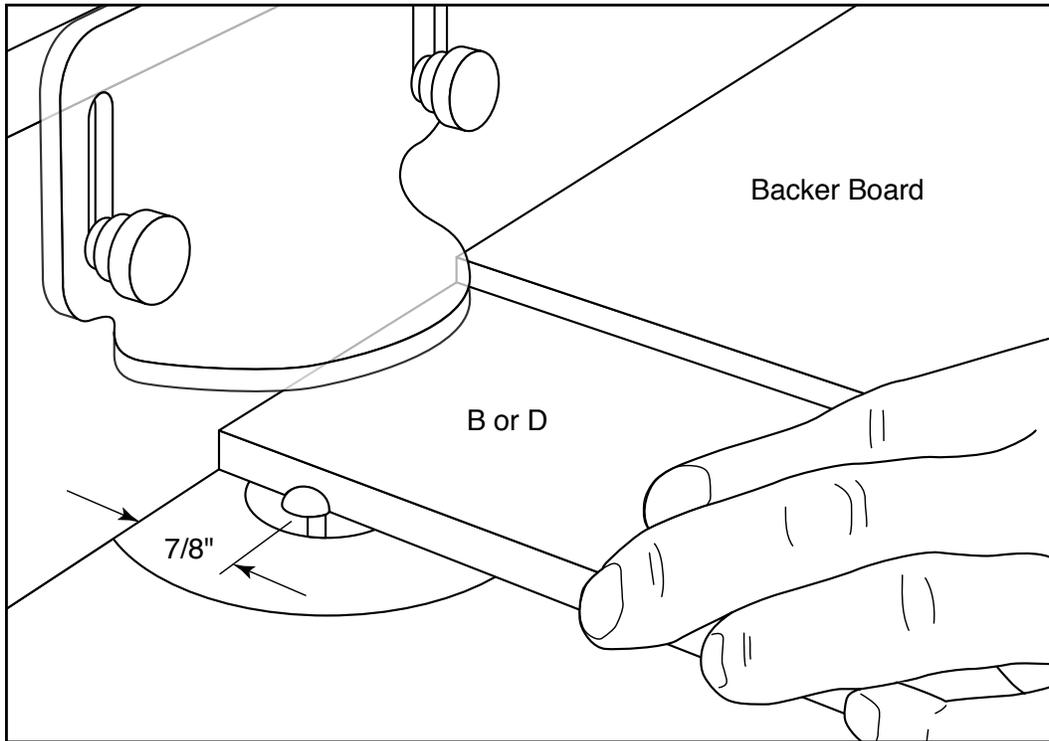
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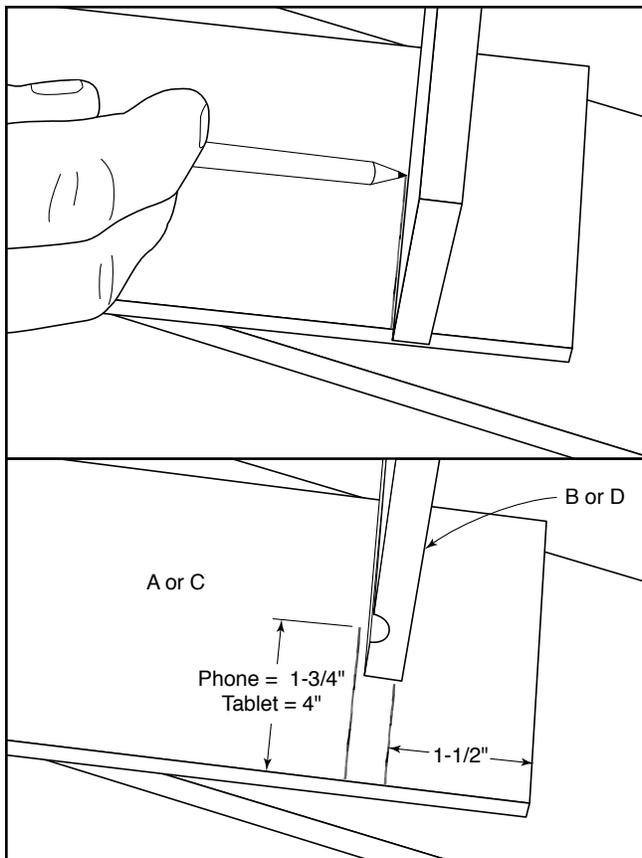
**FIG 1.**



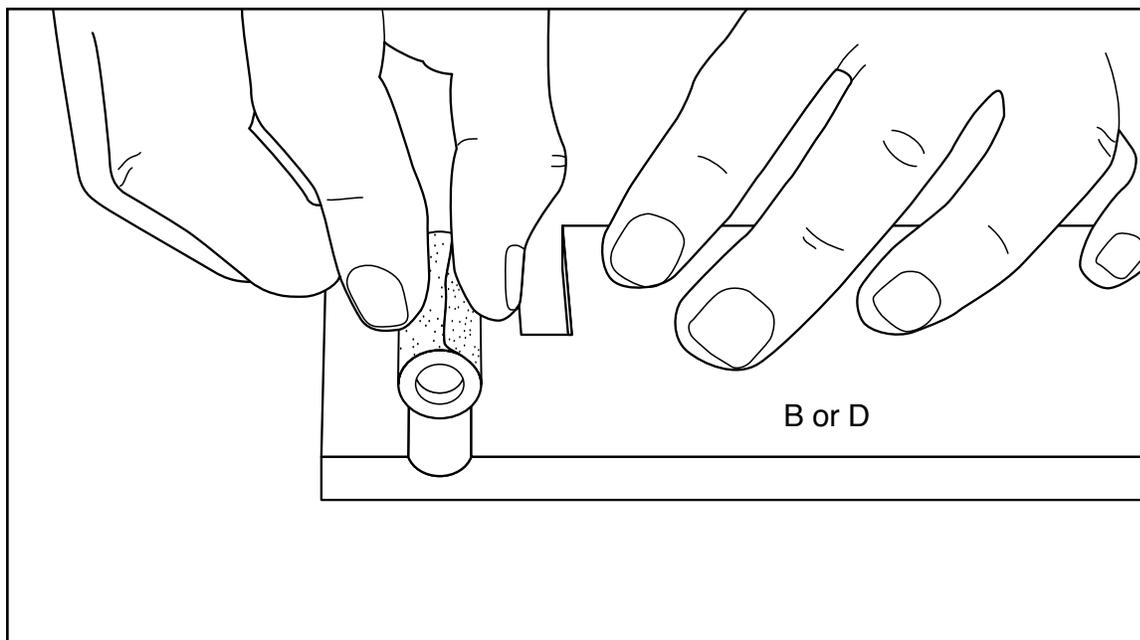
**FIG 2.**



**FIG 3.**



**FIG 4.**



**FIG 5.**

