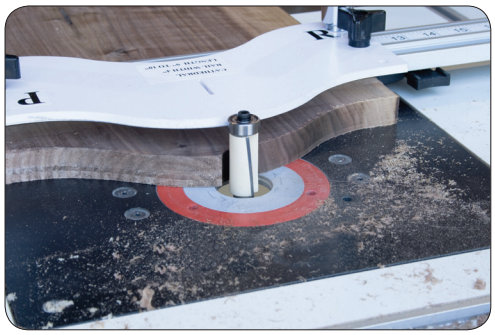
Panel Master Pro Instructions

Make professional looking raised panels with the Panel Master PRO! Typically when making raised panel doors you must, tape, or tack your stock piece to a template, this wastes time and can damage the wood. With the Panel Master PRO we have solved this problem by allowing you to clamp your stock secure with a 180° straight edge clamp. This clamp gives total range of motion across the table top and it also accepts two steel handles for a solid feel while working your stock through the router bit.

PLEASE READ THE ENTIRE SET OF INSTRUCTIONS, AND OWNERS MANUAL'S FOR ALL OF YOUR POWER TOOLS BEFORE PROCEEDING WITH ANY PROJECT.

The Panel Master Pro System is designed to be used with a flush trim bit only. Use Panel Master Pro system to make the arched portions of a raised panel door in preparation for the raised panel and rail and style cuts. The Panel Master Pro System is not intended to be used with a Raised Panel router bit, or Rail and Stile router bits. Be sure to read and understand any and all instructions that come with your Raised Panel router bit set before making any cuts with the Raised Panel set.

CAUTION: Make sure the power supply is disconnected on your power tool(s) or machinery before making any adjustments. Don't use any tools with out the proper safety guard(s) in place or without reading the instruction manual that came with the unit. Always wear the proper eye, ear and respiratory equipment when using power tools.



The Panel Master Pro

Includes:

- **1ea. 90° Squaring Head** - used for keeping your stock squaring during the cutting process.
- **2ea. steel handles and 1 hardware pack**- attach directly to the straight edge clamp and provide a solid feel in your hands while making your cuts.
- **1ea. 24" - 180° straight edge clamp** - The clamp head rotates to give you an un-obstructed working plane on top of your router table.
- **1ea. 10 pc template set** - Will do the panels and rails from sizes 10" to 19".

Additional items you will need.

1. **Router** - at least a 2-1/2 hp variable speed router or larger mounted on a router table
2. **Flush trim router bit** - The bit must be long enough so the bearing cleanly contacts the template during the cutting process. About a 2" to 2-1/2" flush trim bit is recommended.
3. **Bandsaw or Jigsaw** - The bandsaw or jig saw is used to cut the rough profile on the stock.
4. **Phillips head screwdriver** - Needed to attach the 90° head. (a power driver may be used as well)

Cutting the Top Arched Panel

Step 1

Install the 90° head on to the clamp. Place a SQUARE piece of stock between the jaws, do not secure clamp. Square the 90° head to the straight edge clamp. Once square, secure the wood in the clamp. Next, with the two self tapping screws that are provided, secure the 90° head directly to the clamp.

Note: you may need to use a power driver to drive the screws in securely.

Shop Note

Each template is clearly marked with a letter "P" and a letter "R" on opposite ends. These letters designate which side is used to cut the Panel (P) and the Rail (R).

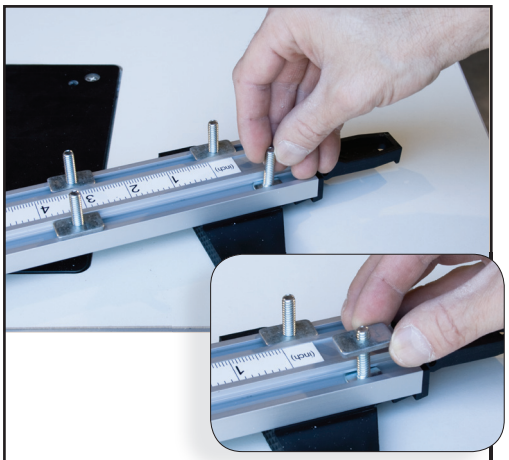
Step 3

Choose the template that corresponds to the size panel you are cutting. Find the center mark of your stock piece and mark it. Place the template on your panel with the "P" side of the template facing the end to be cut. Center the template to your center line. With a pencil, mark a line following the template along the entire width of the stock.

Step 4

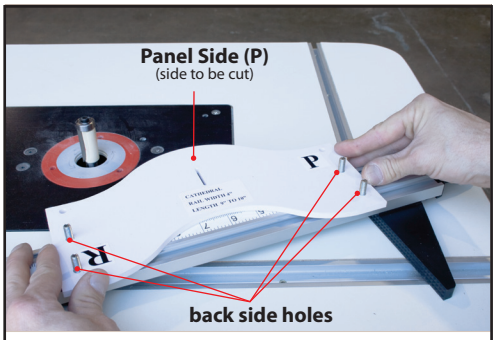
With a jigsaw or bandsaw, rough cut your stock. Leave some stock as you cut, do not cut right on the line, you will need this line as a reference later.

Step 5



Slide the 4 T-bolts into the straight edge clamp, and place the rectangle washers on so they are flush with the top track of the clamp.

Step 6



Place the template on to the four bolts. Use the back side holes on the template. Make sure the Panel side (P) is facing front. This is done to insure that the template is set so that the router bit will not hit the clamp during the cutting process.

Cutting the Top Arched Panel Continued

Step 7

Place the two knobs on the "front" side of the template and place the two steel handles on the back side of the template. Do not secure the knobs or handles tightly. The template will have to be moved in the following step.

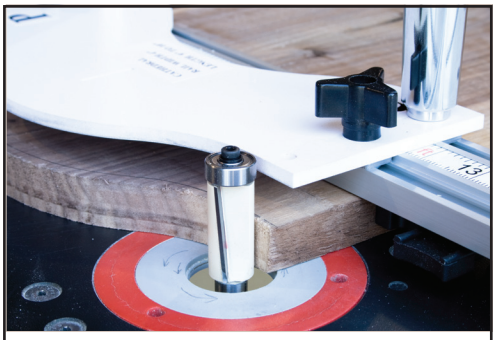
Step 8

Place your stock under the clamp and the template. Adjust and align the template (left to right) and the stock (forward and backward) until you line up with outlined profile you made earlier in step 3. Once the stock and the template are aligned, secure the template by tightening the steel handles and the knobs

Step 9

Using the 180° handle, and making sure the sliding head on the clamp is against the side of your stock, secure the stock by lifting up on the 180° handle as shown in photo above.

Step 10



With the power off, install a flush trim router bit into your router. Adjust the height of your flush trim router bit so the bearing rides cleanly on the template as shown in the photo above.

Step 11

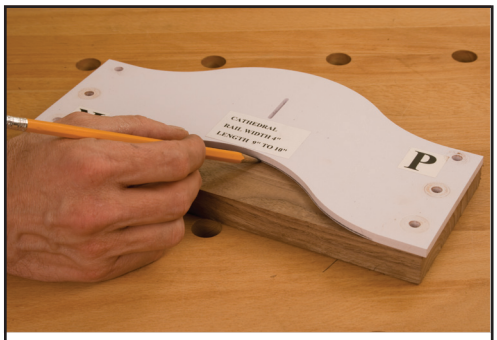
With your stock and Panel Master Pro System secure, make your cut. Start out on the end and work your way slowly across the stock. You may need to make multiple passes depending on how much stock you left to remove.

Step 12

Your panel should now be ready for the raised panel bit cutting process.

Cutting the Top Arched Stile

Step 1



Find the center mark of your stile piece and mark it. Place the template on your stile with the "R" side of the template facing the end to be cut. Center the template to your center line. With a pencil, mark a line following the template along the entire width of the stock.

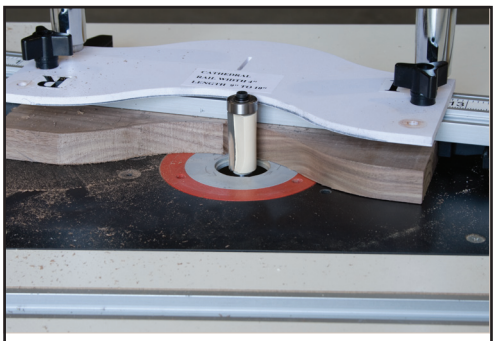
Step 2

With a jigsaw or bandsaw, rough cut your stock. Leave some stock as you cut, do not cut right on the line, you will need this line as a reference later.

Step 3

Repeat steps 5-10 in the "Cutting the Top Arched Panel" section with the exception of keeping the "R" side facing the front of the Panel Master Pro system.

Step 4



With your stock and Panel Master Pro System secure, make your cut. Start out on the end and work your way slowly across the stock. You may need to make multiple passes depending on how much stock you left to remove.

Step 5

Your stile and panel arches should match and resemble the photo shown above.

Shop Note

If you place the stile and panel together at this point, they will NOT appear to line up. This is perfectly normal. The geometry of the two pieces are slightly different to accommodate the raised panel, and stile and rail cuts.

NOTE: The Panel Master Pro is intended to be used for cutting the top arches for raised panel doors only. It is not intended to be used for cutting the styles or the rails. Below are general guidelines for cutting the remaining pieces for the cabinet door. For more details on how to cut these portions of the cabinet door, refer to the link(s) below for more details.

For more details go to: http://www.ptreeusa.com/Arched_Door_Instructions.pdf

Using the Panel Master Pro with a Raised Panel Router Bit

When using the Panel Master Pro to cut the arched raised panel portion of the stock, there are a few things to remember when doing so.

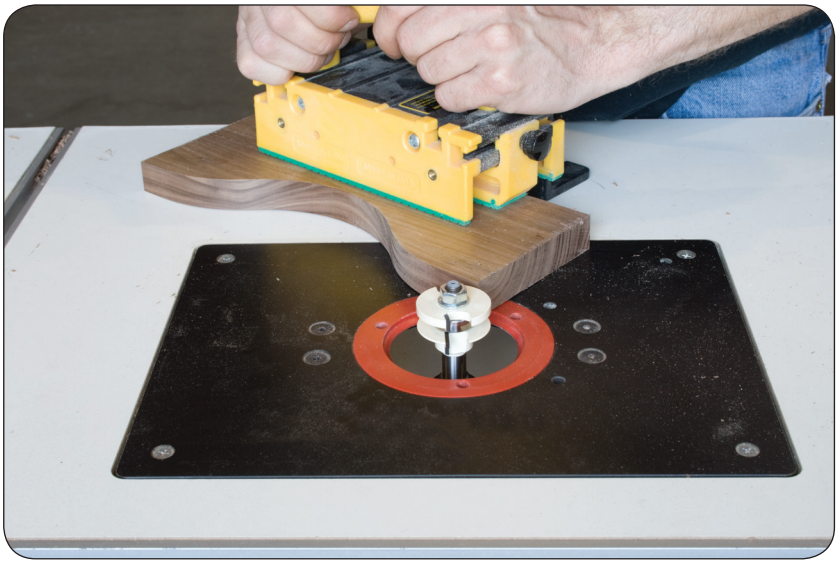
1. Make sure the clamping system and template are backed up, so that neither the template or the clamp do NOT hit the router bit. *Note: this is a free hand cut, the template is not used during this process, however, the template must stay on the Panel Master Pro system for stability purposes.*

2. Raised panel bits are large bits that remove a lot of stock at once. It is important to keep a slow and steady pace while making this cut. Do not slam or force the stock into the cutter.

3. It is recommended to slow the speed of the router when using larger router bits. When using raised panel bits the recommended speed setting is 14,000 to 16,000 rpm.

For more details on cutting with raised panel bits go to: http://www.ptreeusa.com/Arched_Door_Instructions.pdf

Using Stile and Rail Router Bits



When cutting the stiles and the rails on your raised panel door you will NOT be using the Panel Master Pro System. The stiles and rails are too narrow for the system to properly fit the stock.

1. When making the cut(s) on the stiles and rails, be sure to use a safety push device.

2. The stile and rail cutters are large bits that remove a lot of stock at once. It is important to keep a slow and steady pace while making this cut. Do not slam or force the stock into the cutter.

3. It is recommended to slow the speed of the router when using larger router bits. When using stile and rail bits the recommended speed setting is 14,000 to 16,000 rpm.

For more details on cutting with the stile and rail bits go to: http://www.ptreeusa.com/Arched_Door_Instructions.pdf

Cutting the Bottom and the Sides of the Panel

When cutting the sides and bottom on your raised panel door you will NOT be using the Panel Master Pro System. Install your fence on your router table. This is done to setup for cutting the bottom and the sides of the panel.

1. Align the fence in the desired position to the raised panel bit. Secure the fence in place. *Note: Make sure ALL safety devices are in place before making the cuts: featherboards, safety guards, safety glasses, etc.*

2. Make the bottom cross grain cut first and then the side cuts. Depending on your raised panel bit, you may need to make a couple of passes to obtain optimum results.

For more details on cutting the bottom and the sides of the panel go to: http://www.ptreeusa.com/Arched_Door_Instructions.pdf