Vectric

Passionate About CNC

Project Tutorial
Featuring compatibility with nearly all CNC Machines

It is our pleasure to provide our customers with fun and useful projects to enjoy!

Compatible with:

VCarve Pro 6.5
(or greater)

and

Aspire 3.5
(or greater)

Sample Carved with:
ShopBot Buddy
PRSalpha BT48

ShopBot ®
www.shopbottools.com

Victorian House Plaque
Designed for Vectric™ by Michael Tyler

This project features a caricature of a Victorian House along with three plaque ideas/styles. A plaque is hung from the bottom of the house base using hooks and screw eyes.

You can use any of the plaque samples as-is, or easily design your own using the Vectric software. Custom plaques could be made to display a family name, seasonal greetings to swap out as appropriate, or just to say "Home Sweet Home"!

If used indoors, the project could be modified to integrate a frame to display a family photo, white board or cork board for messages, calendar holder, hooks to hold keys, and so on. Lots of possibilities, if one uses their imagination.

The actual finished dimensions will vary, depending upon which plaque is combined with the House portion, but the approximate dimensions for these samples are 12" wide x19" tall x 1.5" deep.

Main items you will need:

1) The Project Files (included):
• House_1.crv
• Plaque_1.crv, Plaque_2.crv, Plaque_3.crv

2) Boards with the following dimensions:
• House_1:   .75" x 9" x 24"
• Plaque 1 or 2: .75" x 9" x 13"
• Plaque 3:   .75" x 9" x 14"

3) Screw eyes & cup hooks, sawtooth picture hangers (or your own preference for hanging the house assembly...keyhole slots, picture wire, etc.)

4) Drill, wood glue or epoxy, sandpaper, stain and/or paint and clear finish

5) A Dremel-type rotary tool with assorted sanding wheels and bits to sand small details and speed up preparation for finishing.
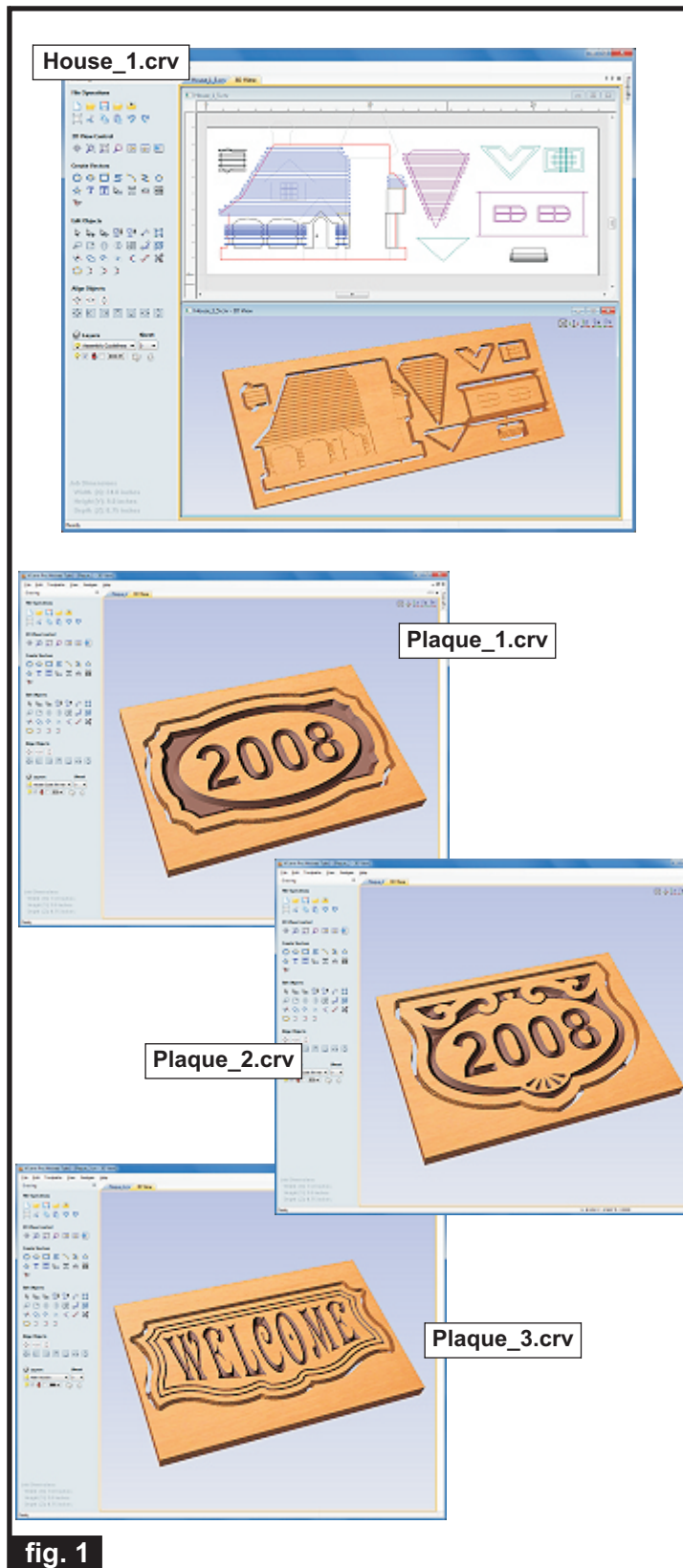
CNC Bits used for the Sample:

90° V-Bit (.75" dia.)
0.125" End Mill
0.25" Down-Cut End Mill

STEP 1 - Open and Review the Project Files

Start your VCarve Pro or Aspire software and open the project files. (fig. 1)

House_1.crv

Plaque_1.crv

Plaque_2.crv

Plaque_3.crv

fig. 1

Carefully review all the toolpaths and make any necessary changes to suit your particular bits and machine. The toolpaths are currently set with feeds, speeds and pass depths that were used in creating the original sample. Please don't use them directly until you review them for your own setup.

You can edit the tools and change the settings to your own preferences and requirements. **It is very important to recalculate all toolpaths after making any edits/changes.** Once you have recalculated for your own machine and bits, reset the preview, then preview all toolpaths again to visually verify the project outcome on-screen.

The project is designed with tabs to hold parts in place during the final part cut outs. You may delete the tabs if you use some other reliable hold-down method.

STEP 2 - Run the Project

When you are satisfied with your settings, save the toolpaths to the appropriate Post Processor for your machine, place your material on your machine bed and proceed to run the project. (fig. 2a, 2b)

fig. 2a

fig. 2b

(cont.)

STEP 3 - Release and Sand Parts

Separate the parts from the material, then sand off any tab remnants, fuzzies and undesirable toolmarks. (fig. 3a, 3b)

fig. 3a

fig. 3b

I machined a 0.1875" x 0.5" x 5.5" pocket onto the backside of the house body for recessing a couple sawtooth picture hangers. You may opt for some other method (such as keyhole slots) so the backside pocket is not part of the project files. (fig. 3c)
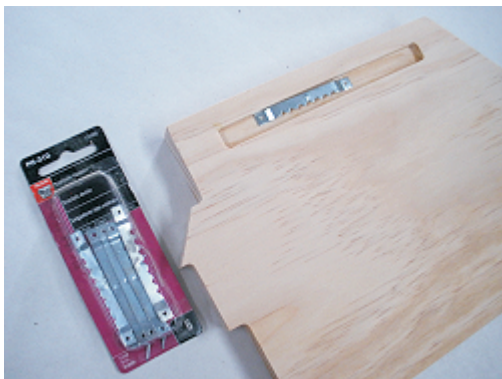

fig. 3c

STEP 4 - Glue-Up and Assembly

Glue the parts onto the house body using the House_1.crv vectors or the photos on pages 1 & 4, as a guide. **NOTE:** You may want to apply your finish BEFORE assembly like I did. Do what is easiest for you. (fig. 4a)

fig. 4a

Mark locations for the screw eyes and hooks. Drill pilot holes, then install the hooks and eyes. (fig. 4b, 4c, 4d)
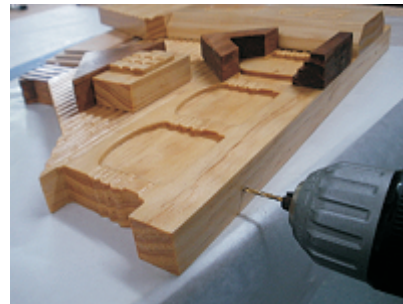

fig. 4b

fig. 4c

fig. 4d

(cont.)

STEP 5 - Finish Application

Apply the finish of your choice. Here's what I used on my Victorian House Plaque samples made from Select Pine:

• Stained the stairs, chimney, porch and dormer roof with Minwax #233 English Chestnut stain

• 3 coats of thinned Bullseye Sealcoat, sanding between coats (2 parts sealer/3 parts Denatured alcohol)

• 3 coats full-strength Bullseye Sealcoat, sanding between coats

• Burnt Umber Acrylic paint in the lettering and most v-carve recesses

• Several coats of Krylon Crystal Clear Acrylic spray

IN CONCLUSION

I hope you enjoyed the Victorian House Plaque project and will have fun creating your own variety of decorative plaque designs!

Happy Carving!

Michael

Materials Source Page

• **3M Radial Bristle Discs from** www.mcmaster.com
(stack 3 discs at a time on your rotary tool mandrel)
     80-grit: part # 4494A19
     220-grit: part # 4494A18

Krylon Clear Gloss Acrylic
from WalMart™

Miscellaneous Items Purchased at Home Depot™

• **Bullseye SealCoat and Denatured Alcohol**
• **Minwax #233 English Chestnut stain**
• **Screw Eyes, Hooks and Sawtoothed Picture Hangers**

Miscellaneous Items Purchased at Lowes™

• **Sandpaper**
• **Disposable Brushes and Paint Rags**

Miscellaneous Items Purchased at Michael's Arts and Crafts™

• **Burnt Umber Acrylic Paint**
• **Artist Brushes**

Additional Resources

RESOURCES...

There are numerous resources for Vectric software owners to make their experience with their products more enjoyable. The Vectric website includes videos and tutorials to provide a good overview of the software products and how to use them. (http://www.vectric.com/WebSite/Vectric/support/support_vcw_tutorials.htm)

As well as the resources available from the Tutorial page, please also visit the 'FAQ' and 'How To' pages for more support information...

'How To' webpage

http://www.vectric.com/WebSite/Vectric/support/support_how_to.htm

'FAQ' webpage

http://www.vectric.com/WebSite/Vectric/support/support_faq.htm

Vectric User Forum

Every Vectric software owner should join the Vectric User Forum (http://www.vectric.com/forum/) where fellow users share their experience and knowledge on a daily basis. It is a FREE service that you will surely appreciate. A handy Search Feature helps you find answers to any questions you may have. There are Gallery sections as well, where you can post and view photos of projects created with Vectric software.