

CNC Routers

Your Road Map To Get Started On The Right Path



Hello CNC'er. I'm Garrett Fromme. I'd like to welcome you to the CNC router club.

Many CNC'ers have asked to have a list of videos I've created. Well, now you have it.

This PDF is a list of all the videos I have done, and they are organized into groups to take you right up the ladder without all the searching we do for the right video.

The groups include:

- Learning about CNC routers
- Choosing your CNC router
- What you need WITH your CNC router
- What to do after you have your CNC router
- All about router bits
- Design software& step-by-step designing
- Easy step-by-step CNC projects
- Troubleshooting

Each video has a brief description. Click on the link next to the description to watch it.

You will also find links to CNC related products I recommend.

Make sure to scan the entire document first so you know everything that is available here.

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Making Your CNC Journey A Wonderful Experience

Please Take A Moment To Read This

My job is to help you become an amazing CNC'er. That's why this PDF is put together for you. As you will see, you have a ton of educational videos to help you get rolling with virtually anything CNC routers.

Although the PDF is not complete, it was prudent to give you everything now so you can get creating faster!

As you move forward on your CNC journey, I would like to ask a favor. You don't have to, but it helps compensate me for the time and effort put in to create all these resources for you.

Teaching you is how I make my living. There are 2 ways I receive income. The first is through router bits sold on the [IDC Woodcraft store](#). The second is through the links provided in the [IDC YouTube](#) video descriptions, and throughout this little book. They are called affiliate referral links.

When you use them, I receive a small commission. So, if you choose to buy any of the items in videos, please refer to the description of the video first, and use those links.

If you decide to get something from Amazon, or other sources online, please ask me for a link first. Will you do that, please?

Thank you

Garrett Fromme

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Making Your CNC Journey A Wonderful Experience

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Special Notes

MAC users

There are very few CNC programs that can run on MAC. The exceptions are web based programs, such as Easel.

Free Resources

[FREE Feeds & Speeds table](#)

Be the first to know

- Join the [CNC Insiders](#) email list
 - Receive tips & tricks
 - First to be notified of discounts
 - Get extra discounts on IDC products
 - First to be notified of classes

Want to start a CNC business?

- Join the [CNC Entrepreneurs Facebook group](#)
- A like-minded growing community of CNC'ers learning and sharing how to start and grow a home CNC business

Technical issues with your CNC?

- Join [CNC Troubleshooters](#) Facebook group

CNC Podcasts

- Listen to [CNC For Beginners Podcasts](#) to keep that inspired creativity going



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Before we get to the video list

If you have not gotten a CNC router, but are in the market for one, and just want to get the stuff you need without all the research and guessing, my top recommendations for everything are listed here.

My Top Recommendations

CNC router

- Longmill 30x30 CNC router
 - Website → <https://www.sienci.com/?ref=idcwoodcraft>

Control software to run your CNC router

Regardless of your CNC router, [gSender](#) is my top pick. And it's FREE

- Download gSender here → <https://bit.ly/3y6rnwg>

Router bits

- Complete CNC router bit starter set → [Click here](#)
 - **Be sure to get a surfacing bit**
- Individual router bits → [IDC Woodcraft store](#)

Design Software

Vetric Vcarve or Aspire are my top recommendations

- For machines with cutting space of 24 x 24 or smaller
 - Vcarve Desktop → <https://bit.ly/3D4CwjH>
- For machines with cutting space larger than 24x24
 - Vetric Vcarve Pro → <https://bit.ly/3d4WrEU>
- To create 3D models
 - Vetric Aspire → <https://shrsi.com/37pw9>
 - Aspire also has all the carving features of Vcarve as well as the tools to create 3D models
- Alternate design software when budget is a concern
 - [Carveco Maker Plus](#)

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Computers

Computer to do your designing

It is recommended to have at least 3 USB ports for your computers

- For anything up to Vectric Vcarve
 - HP Pavilion → <https://amzn.to/3lqSFE3>
- For Vectric Aspire
 - HP Pavilion → <https://amzn.to/3clh9Kc>

Computer to run your CNC router

- You do not need an expensive or powerful computer to run the CNC router.
- You do not need a dedicated laptop for your CNC router. However, it does make your CNC'ing much more convenient.
- Recommendations for CNC router dedicated laptop
 - Lenovo IdeaPad 14-inch: <https://amzn.to/3rcIjyn>
 - ASUS Laptop L410 Ultra-Thin Laptop, 14": <https://amzn.to/3cmtc14>

Other things you need to effectively do CNC router work

Dust collection

All dust collection requires you to have a dust shoe for your CNC router

- Shop vac (I use this)
 - Rigid 5hp shop vac → <https://amzn.to/3nJll1>
 - 2.5" x 20 foot flex tube → <https://amzn.to/3CGY2Ls>
- For high sawdust extraction (you will need all 3 items)
 - 4" intake Cyclone → <https://amzn.to/3xcZALP>
 - 4" to 2.5" coupler adaptor → <https://amzn.to/3cDMSfN>
 - 2.5" x 20 foot flex tube → <https://amzn.to/3CGY2Ls>



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Ear protection

- Effective ear muffs → <https://amzn.to/3osAqGi>

Calipers for measuring your tools and wood

- Calipers (the set I recommend) → <https://amzn.to/338MAt3>

If you need a website

The website guy I recommend is Dan Monahan. He can help you set things up, or get the foundations set up for you. Here is his contact info.

Dan Monahan

[587-809-0101](tel:587-809-0101) International Business

[780-220-0932](tel:780-220-0932) Personal

dan@danmonahan.ca

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IDC Woodcraft YouTube Videos

Learning about CNC routers

- Determine what you want to make before you choose a machine → <https://youtu.be/cfrD7gwsdgQ>
- Avoid making a bad purchase → <https://youtu.be/R8u4RGPPz-8>
- CNC router terminology → <https://youtu.be/R5RX1esxczs>
- Understanding CNC routers → *Video not made yet*
- What is G-code → https://youtu.be/G_WgvH5tU8E
- Longmill CNC router review → <https://youtu.be/rqKwcqHdSPw>
- Control software → *Video not made yet*
- Do you need a dedicated computer → <https://youtu.be/Ykftr4YxORw>

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Router Bits

- Router bits tutorial → <https://youtu.be/wdQ-hllmKY>
- What are feeds and speeds → <https://youtu.be/OtLeqvvG4j8>
- Surfacing bit → <https://youtu.be/JwFwdbohzjY>
- Surfacing bit feeds & speeds → <https://youtu.be/1Y4UonzWhSE>
- Bad surface finishes (MUST WATCH) → <https://youtu.be/tykj6Nn-ysM>
- The 120° V-bit → <https://youtu.be/L-mCsobn0nc>

After the CNC router purchase

- Building your CNC table → <https://youtu.be/3bP7EBZbafc>
- Assembly of the router → *Video not made yet*
- Tramming → *Video not made yet*
- First thing to do, Break in your CNC router → <https://youtu.be/HleRuNxl108>
- Testing the router → <https://youtu.be/l1oh8nekPu4>
- Using the touch probe → *Video not made yet*
- Setting the XYZ zero without probe → https://youtu.be/UaDMzl_ZXVg
- First test cut → https://youtu.be/G_4l1LITogw
- Work holding CA glue → <https://youtu.be/4eS8a-tE0Q>
- How to find corners on round boards → <https://youtu.be/FwzPjq2r53w>
- What are feeds and speeds → *Video not made yet*
- Changing bits → *Video not made yet*
- Making your spoilboard (Longmill) → <https://youtu.be/dbxtLQY26Cw>
- Spoilboard surfacing → <https://youtu.be/-NsPZD0az5Y>
- Why you want grids on your spoilboard → <https://youtu.be/KTvyreaShC0>
- Spoilboard grid → <https://youtu.be/KTvyreaShC0>

Design software

- Choosing the right software → <https://youtu.be/u1O6u5DITSo>

Designing with Vectric

- Vectric beginners tutorial → <https://youtu.be/hlzYO-ir4MY>
- Designing a resurface program → <https://youtu.be/-NsPZD0az5Y>
- Set up router bits in Vectric → <https://youtu.be/670Xzgf0LiA>
- How to design the right way (flag) → <https://youtu.be/7069FGnt7WQ>
- Designing good projects the first time → <https://youtu.be/1BuJaBjY1Hg>
- Understanding files & file types → *Video not made yet*
- How to work with bitmaps (pictures) → <https://youtu.be/Zafn3m0lkiY>
- Trace bitmaps / picture → <https://youtu.be/v-gqZnKyxb8>
- Nodes → <https://youtu.be/kEGxnlfzmNY>
- Nodes (clean up bitmap traces) → https://youtu.be/X_dyEAlsddY
- Vector validator → <https://youtu.be/s5XvV0F7VcQ>
- Change the size of designs (scaling) → <https://youtu.be/Ezc58UZvIVI>
- Getting perfect letters → <https://youtu.be/-p9BzKhcffE>
- Move, rotate, angles → <https://youtu.be/HcYT7oHMkD4>
- Unusual designs (heart with word) → <https://youtu.be/EIBITxfPI1E>
- How to do an inlay → <https://youtu.be/Naxq3SbQH50>
- Carving complicated art from pictures → <https://youtu.be/JMwhmJ1911g>
- Carving handwriting → <https://youtu.be/pSJyxQmfOzl>
- Tangent lines between circles → <https://youtu.be/7PoqTmFqxnQ>
- Add accents (radius) → <https://youtu.be/fxbbFqUZ2GM>
- Understanding layers → <https://youtu.be/ujA7Uug9ph8>
- Keyholes / T-slots → <https://youtu.be/gDG1YfiDtJY>
- Designing a sign in 15 minutes → <https://youtu.be/TrexJNCXcBY>
- How to import SVG, DXF, STL and other files → https://youtu.be/ApV4awNLd_g

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IDC WOODCRAFT

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- Pocket & profile tool paths → <https://youtu.be/VjgljoKwZ4o>
- Stacked text → <https://youtu.be/pdUrYFqSsLo>
- Difficult bitmaps → <https://youtu.be/cfSktmZQrB4>
- Difficult bitmaps (fire dept Maltese cross) → <https://youtu.be/UDEWlqMQuEA>
- Designing from photos & pictures → <https://youtu.be/honT1t1Wndk>
- Designing fine details → https://youtu.be/zr8cp7WO_wc
- Add accents, editing strange shapes → <https://youtu.be/bjAnRfb5sX0>
- Circular array (circular patterns) → <https://youtu.be/9TAV62B4yck>
- Fluting → https://youtu.be/oldWea23_ME
- How to get 3D models → <https://youtu.be/0ulBJKNYXuQ>
- Working with multiple 3D models → <https://youtu.be/l6E64E3d5FY>
- Carving 3D models (rooster) → <https://youtu.be/8OpMJCeJ1Mg>
- Extreme detail carving → <https://youtu.be/zMMcXC5H4Hs>
- Drilling → https://youtu.be/e7xMpL-0F_A
- Accurate holes → <https://youtu.be/GON7Nm3wbfU>

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Projects

- First project (house number sign) → <https://youtu.be/C46zguYGM-o>
- First project (make your own clamps) → <https://youtu.be/b9miRXZGd1I>
- 2nd making clamps video → <https://youtu.be/t3Mpre6y2OE>
- Glass engraving → <https://youtu.be/TvmUO3Cvxmk>
- Easy projects (carve hand writing) → <https://youtu.be/pSJyxQmfOzl>
- Easy interesting projects → <https://youtu.be/3YMRshklHws>
- Design a project in 3 minutes → <https://youtu.be/DsEgG3KyUck>
- Easy CNC projects (Christmas block) → <https://youtu.be/zXNNgGe2qcY>
- Repurpose an old picture → <https://youtu.be/F2Qun0Ub0dU>
- Easy glass engraving idea → <https://youtu.be/ACobkLPM0qw>
- Carving handwriting → <https://youtu.be/pSJyxQmfOzl>
- Recovering botched projects → https://youtu.be/g_4TTyQk6zo

CNC Business

These videos deal with how to have a successful business

- Business, what they don't tell you → <https://youtu.be/zXNNgGe2qcY>
- Why a niche makes 10x \$\$\$ → <https://youtu.be/kxqxM3hcTvA>
- Must know G-code to make money → <https://youtu.be/jyi3SzJjXmQ>
- Selling at Christmas → <https://youtu.be/cfSktmZQrB4>
- Increasing CNC sales → <https://youtu.be/9lZbD-D3CGU>
- How to sell on Etsy → <https://youtu.be/TqC8uEREw7E>
- Making money with CNC → <https://youtu.be/cx6f6XbL2ek>
- The power of social media → <https://youtu.be/i1DJ4e3ut-U>
- 3 strategies for success → <https://youtu.be/aNI-h9f8R7Y>
- #1 rule to follow for business → <https://youtu.be/2iXQWYWdFFU>
- How to know what to make and sell → <https://youtu.be/6JefEEDyAw>
- Why most CNC businesses struggle → <https://youtu.be/zEeCL4-k1DU>
- Success is knowing what people want → <https://youtu.be/3Zcucjsweqc>
- How to make money with a CNC → <https://youtu.be/o71eXg-Vvt8>
- How to sell CNC projects → https://youtu.be/vDalb_is08k
- Q&A how to charge for projects → <https://youtu.be/6FLepAuHGec>
- Best and easiest way to start → <https://youtu.be/FHzNje2aTLM>
- 3 “must know” principles for success → <https://youtu.be/UoNrVVal0LQ>
- The CNC entrepreneur → <https://youtu.be/J-uQtrts5fg>



Making Your CNC Journey A Wonderful Experience

CNC Business Success Mentoring

This series is a recorded mentoring session with a new CNC'er named Mark Garrett. Mark started to feel listless in his job, and stagnant in life. He wanted something that would be 'his', that he could feel proud of.

Mark found CNC routers, and in hopes of making a go of doing his own thing, got one to make some money.

He quickly found out that stepping into business was a very different animal than he thought it would be. He didn't know how to approach it.

In his search for answers, he eventually found me, and requested help. After some discussion, I felt he had the right drive and gave the okay. With that, he commissioned me to mentor him.

This series will show you the importance of getting guidance from an experienced business mentor. Having a mentor is critical to success.

- Episode 1 → [Starting A Successful CNC Business](#)
- Episode 2 → [Foundations for Success](#)
- Episode 3 → [Know Your Customer!](#)
- Episode 4 → [Why Foundations Lead To Success](#)
- Episode 5 → [Why Niches Are So Important](#)
- Episode 6 → [Why Goal Setting Is Important](#)
- Episode 7 → [Accelerating Your Business](#)

Unfortunately, this mentoring came to an end due to changes in Mark's life. However, you will have gained excellent foundations from this series.

To consider being mentored, email me at garrett@idcwoodcraft.com

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Troubleshooting CNC Projects

- Why so many toolpaths → https://youtu.be/z_nlwGMbQdw
- Why the bit goes down while cutting → <https://youtu.be/LFeBRBjBYbk>
- Why CNC router stops randomly → <https://youtu.be/UFi-dP1-WNE>
- “Tool will cut through material” → <https://youtu.be/dljHiTOUFEw>

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Making Your CNC Journey A Wonderful Experience

What You Need To Do CNC Routing

- CNC Router
- CNC router bits
- Design Software
- Control software for your router
- Work holding
- Dust collection

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