

All Acorn documentation is on the Acorn Technical Support Forum [click here.](https://centroidcncforum.com/viewtopic.php?f=60&t=3397)
<https://centroidcncforum.com/viewtopic.php?f=60&t=3397>

New Documents related to v4.80 can be found in the link above...they are...

- Acorn Wizard Input and Output canned PLC functions
- Acorn v4.80 release notes
- v4.80 ATC program with instructions
- Acorn hookup schematics

Fresh Acorn CNC12 installation instructions:

1.) Make sure CNCPC meets the Acorn specification requirements found on this page.

https://www.centroidcnc.com/centroid_diy/acorn_quick_start_guide.html

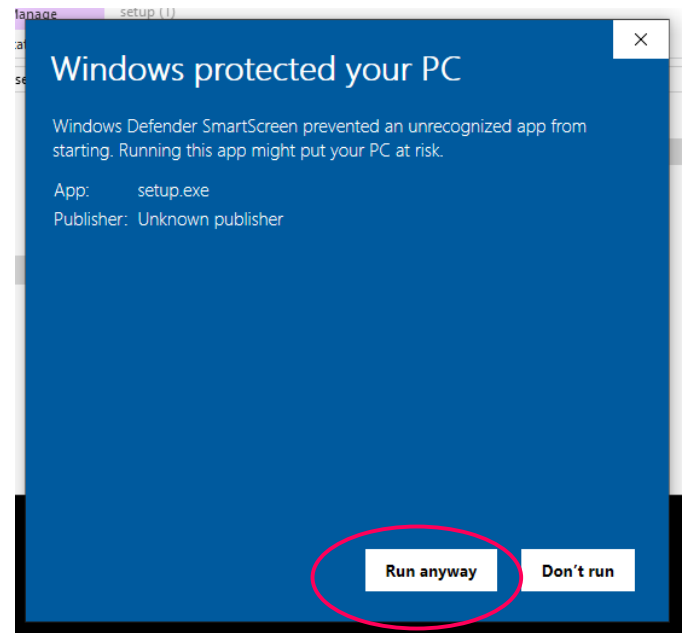
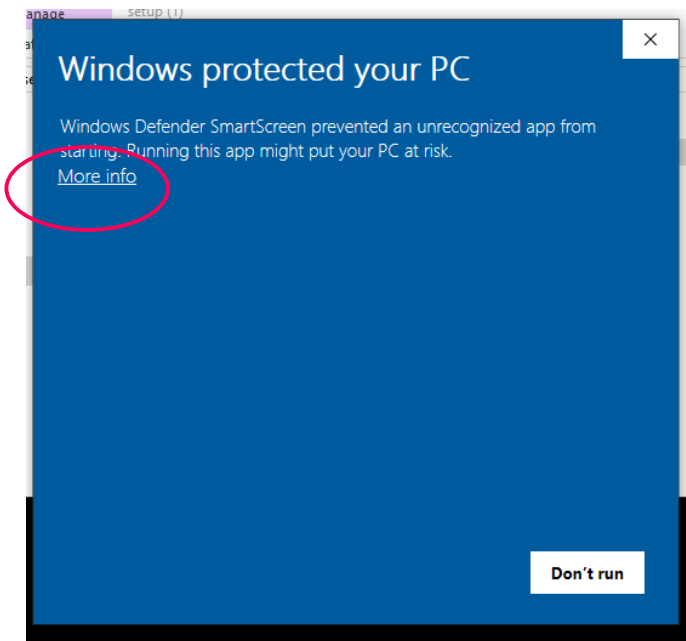
2.) Configure Windows 10/11 for Acorn CNC use, video found on this page. **And Make sure Windows is up to date with the latest .NET Framework updates.**

https://www.centroidcnc.com/centroid_diy/acorn_quick_start_guide.html

3.) Download and unzip the CNC12 zip file,

https://www.centroidcnc.com/centroid_diy/centroid_cnc_software_downloads.html

EXTRACT the zip file, open extracted folder and Double click on setup.exe and follow the instructions to install CNC12. You may run into this Windows notification. Click "More Info" then click "Run Anyway" to continue.



And follow the instructions on the screen to install CNC12.

4.) With the Acorn up and running with a heartbeat connected in BENCH TEST configuration ([see video showing this](#)) double click on the CNC12 Icon to start CNC12.

CNC12 will update the firmware on the Acorn BBG. Follow the instructions on the screen.

5.) Open the Acorn Wizard from the CNC12 Utility screen and use the Wizard to configure the CNC control configuration settings. **BE SURE to press "Write Settings to CNC control" and follow the instructions on the screen to finalized the configuration settings.**

6.) Install the Acorn License file from the Acorn Utility menu, "Options" button.

7.) If desired customize the new VCP to match your application. See the VCP 2.0 users manual
https://www.centroidcnc.com/centroid_diy/downloads/centroid_vcp_users_manual.pdf

Notes:

- CNC12 v4.80 is optimized for 16:9 aspect ratio screens. The sweet spot is 1920x1080 resolution

Updating From Previous versions:

- 1.) Open the Wizard and make screen shots of each Wizard menu of the existing installation so you have a visual record of the current Wizard settings. (Store copies of the report and screen shots in a safe place (even on another computer as an extra precaution would be a good idea as well). Windows "Snipping Tool" is very handy for this. To find this program type in "snip" in the Windows search bar.
- 2.) Update the Windows installation. Update Windows **with the latest .NET Framework updates.**
- 2.) Download and unzip the v4.80 installer zip file. centroid_acorn_cnc12_v4.80_installer.zip
EXTRACT the zip file, open extracted folder and with the Acorn up and running with a heartbeat, Double click on centroid_acorn_cnc12_v4.80_installer.exe and follow the instructions to install CNC12. You may run into a Windows warning notification: Click "More Info" then click "Run Anyway" to continue.
- 3.) With the Acorn up and running with a heartbeat, double click on the CNC12 Icon on the desktop to start CNC12. CNC12 will update the firmware on the Acorn BBG. Follow the instructions on the screen.
- 4.) Install the Acorn License file from the Acorn Utility menu, "Options", then "Import License". Note: Mill, Lathe, Router, Plasma License files used with older software will work with this version of Mill, Lathe, Router, Plasma CNC12.
- 5.) Open the Wizard and re-enter the information and settings from the screen shots made in step 1 and press "Write settings to CNC control" and follow the instructions on the screen.

Note: If you have any custom macros or VCP buttons copy them over from the old install to the new install and restart CNC12. same with tool libraries, custom home programs and wcs positions. cncm.ol, cncm.tl, (mill offset and tool library), cnc.ttl (lathe tool library), cncm.wcs/cnc.t.wcs (WCS positions), license.dat is the Pro or Ultimate license file which can also be copied over from the old directory to the new one as well.

For Plasma it is required to re-calibrate the Torch when a new version of software is installed.

In the Plasma Installation manual continue with Step 4

- 4.) Verify Torch Touch Off and Breakaway functionality
- 5.) Verify basic torch function with the Torch Test Fire button on the VCP.
- 6.) Load a Profile using the Centroid Profile manager to select a Profile to match the material to test cut with.
- 7.) Run the Arc Voltage Calibration macro. See critical details to get this right in the corresponding section of this manual.
- 8.) Load and cut the Centroid test plate plasma G code program to verify operation.

If you had any custom profiles, simply copy them from the old install to the new one and restart CNC12.

And have no fear! Its easy to revert. Make a copy of the any working version of the cncm directory and store in a safe place. To revert back to any older version all you have to do is simply rename the new cncm directory and then copy back the old one and restart CNC12.

PLC programs

- 1.) When using a customized PLC program it is best to edit the Wizard generated 4.80 PLC program with those customization's previously made and recompile. This way the system will have the new features added to 4.80 and the customizations made previously to the PLC.
- 2.) If using one of the Centroid provided ATC PLC programs be sure to download the latest improved versions that match v4.80 https://www.centroidcnc.com/centroid_diy/downloads/acorn_cnc_software/centroid_acorn_v4.80_ATC_programs.zip
- 3.) If using a custom PLC program (a plc program that has been hand edited and compiled such as a custom Lathe Turret program or mill umbrella ATC program) there are two choices.
 - a.) Hand edit the v4.80 auto generated PLC program with your customizations and recompile. Edit the stock VCP 2.0 skin to match your application if necessary.
 - b.) Use 'Restore Report' with CNC12 and then choose "update Wizard with Custom PLC program in use" in the Wizard update pop up window. This will retain the old customized PLC program and install a "Legacy VCP 2.0 Skin" to make the new VCP look just like the old VCP that works with the custom PLC program. This Legacy Skin is user editable! So you can go and change button graphics/words etc after the update.

The Wizard update pop up menu will show up when using an older report UNLESS you have a "Custom PLC in use" selected. The wizard update pop up menu is SOLELY triggered by the Wizard looking at the PLC program comparing it to the currently loaded PLC program .If they don't match you get the update pop up menu
if they do match, no pop up menu.
if the report.zip has "custom PLC in USE" selected then no pop up menu.