

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 v4.82 can be found in the link above...they are...

- Acorn v4.82 release notes
- v4.80 ATC program with instructions these work with v4.82
- Acorn hookup schematics

Fresh Acorn CNC12 installation instructions:

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

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

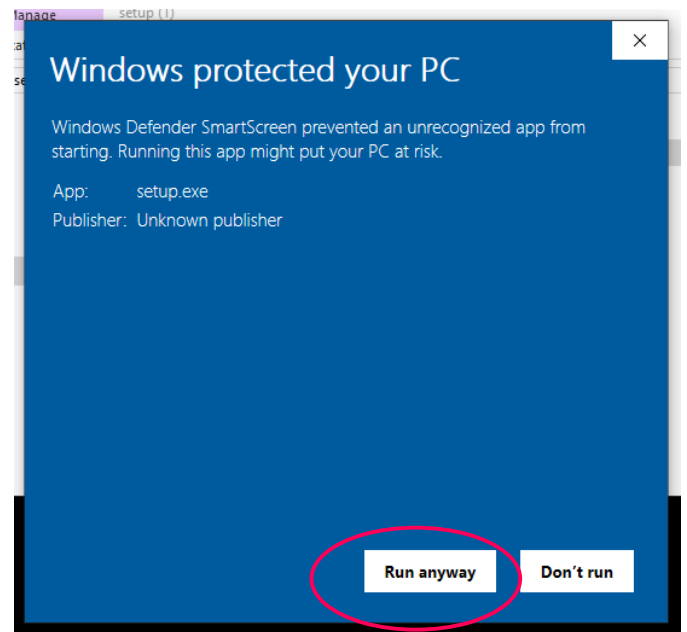
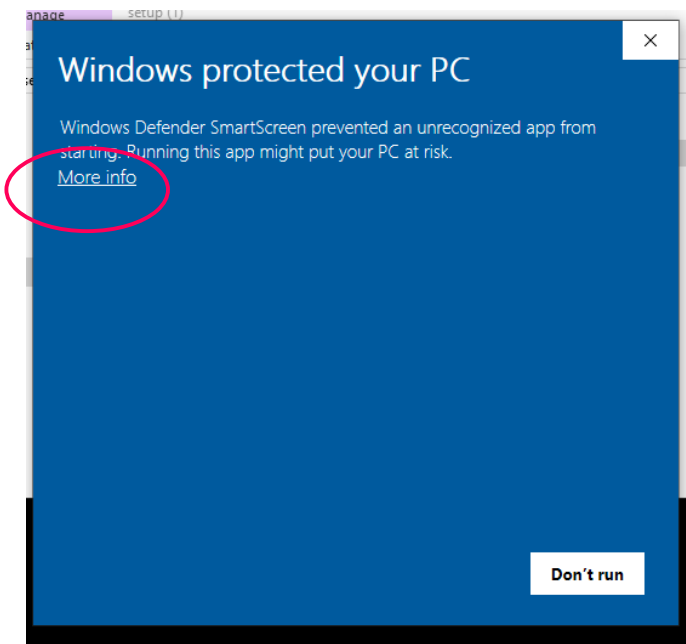
2.) Configure Windows 10/11 for Acorn CNC use, video found on this page. Verify that **Windows is up to date with the latest .NET Framework updates.**

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 F7 Utility menu, Press F8 "Options" then F2 "Import License" and follow instructions. (do not use an Apple computer/product to download and copy the license file to the CNCPC)

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 v4.82 is optimized for 16:9 aspect ratio screens. For best results use a monitor that is 1920x1080 resolution and verify windows is set to this resolution.

Updating From Previous versions of CNC12:

- 1.) Start the existing installation of CNC12, 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 CNCPC Windows installation. Update Windows **with the latest .NET Framework updates.**
- 2.) Download and unzip the v4.82 installer zip file. centroid_acorn_cnc12_v4.82_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_v4.82_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), cnct.ttl (lathe tool library), cncm.wcs/cnct.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. Close CNC12 to do this.

And have no fear! It is easy to revert to any version of CNC12 in seconds. To do this, make a copy of the any working version of the cncm/cnct 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 (such as cncm_v4.82) and then copy back the old cncm direction and restart CNC12.

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.

Custom PLC programs

1.) When using a customized PLC program it is best to edit the Wizard generated 4.82 PLC program with those customizations 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 v4.82

https://www.centroidcnc.com/centroid_diy/downloads/acorn_cnc_software/centroid_acorn_v4.80_ATC_programs.zip

these v4.80 ATC programs work with v4.82 Instructions for installation and configuration of these ATC programs is included with the .zip file.

3.) If using a custom PLC program (a plc program that has been hand edited and compiled there are two choices.

a.) Hand edit the v4.82 auto generated PLC program with your customizations and recompile. Edit the stock VCP 2.0 skin to match your application if necessary. This is best solution as you will gain any new functionality that is included with v4.82 and have your old customizations at the same time.

b.) Alternatively you could use 'Restore Report' with CNC12 and then choose "update Wizard with Custom PLC program in use" in the Wizard update pop up window. This forces v4.82 to use the old PLC program. Only choose this if you don't care about any new features of v4.82. This will retain the old customized PLC program and install a "Legacy VCP Skin" This Legacy Skin is user editable replaceable so it is up to you to copy over your VCP files and install them manually.

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.

As always if using a custom PLC and/or VCP let the Wizard know by selecting Yes to

Wizard Preferences

Window

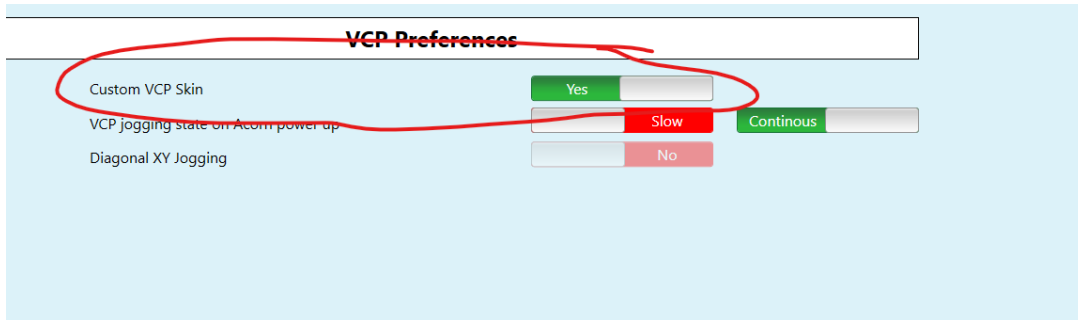
Start up size	Maximized
Start up location	Top Left
Always on top	No
Custom PLC	Yes

When using a Custom PLC program, in conjunction with the Wizard. Use the Wizard to setup the CNC configuration, set "Custom PLC" to YES and then press "Write Settings to CNC control configuration" then install/edit the Custom PLC program and the next time the wizard is opened the Primary System menu will not be accessible and the Wizard will not overwrite/generate a PLC program but will allow other non i/o related CNC configuration changes.

Ask for Password when opening Wizard: No

No = No password required to open the Wizard
 Yes = CNC12 will ask for a password when opening Wizard. The password is the same used for the CNC12 configuration menu password. The default password is "137", the password can be changed in the Wizard Preferences "CNC Control" menu.

and Yes to



when using old and/or custom PLC programs and VCP's.