<u>All Acorn documentation is on the Acorn Techical Support Forum click here.</u> <u>https://centroidcncforum.com/viewtopic.php?f=60&t=3397</u>

New Documents related to v4.64 can be found in the link above...they are...

- Acorn Wizard Input and Output canned PLC functions
- Acorn v4.64 release notes
- Acorn v4.64 CNC12 parameters
- Laser Sync Test Instructions and example laser files are included with the v4.64 installation.
- v4.64 ATC program with instructions
- v4.64 Acorn hookup schematic set

### Fresh Acorn CNC12 installation instructions:

1.) Make sure CNCPC meets the Acorn specification requirements found on this page. <u>https://www.centroidcnc.com/centroid\_diy/acorn\_quick\_start\_guide.html</u>

2.) Configure Windows 10 for Acorn CNC use, video found on this page. 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.

Windows protected your PC	×
Windows Defender SmartScreen prevented an unrecognized app from starting. Punning this app might put your PC at risk. <u>More info</u>	
Don't ru	n



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. <u>BE SURE to press "Write Settings to CNC control" and follow the instructions on the screen to finalized the configuration settings.</u>

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 v4.64 is optimized for 16:9 aspect ratio screens. The sweet spot is 1920x1080 resolution

# How to Update from Previous Version of CNC12 (How to update using a report.zip file from older versions) This applies to Lathe to Lathe upgrade, Mill to Mill Upgrade.

Note. v4.64 introduces a new version of CNC12: CNC12 Router. All installations of v4.64 CNC12 Router must be setup using the Acorn Router Wizard. Said a different way.. you can not use a Mill Report.zip file to Upgrade to v4.64 Router.

a.) Make a fresh report.zip from the current running installation of CNC12.

b.) Make screen shots of each Wizard menu 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)).

c.) Close CNC12 and the Wizard, and then navigate to and rename the cncm and/or cnct directories for instance 'cncm\_4.5\_working' etc.. and then make a copy of the directories as well. Store those copies on another computer as an extra precaution would be a good idea as well.

d.) 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.

e.) With the Acorn up and running with a heartbeat double click on the CNC12 Icon to start CNC12.

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

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

g.) Navigate to the CNC12 Utility menu and select the "Restore Report" button, and <u>restore the report.zip file made in a.</u>) and follow instructions on the screen.

f.) Navigate to the Utility menu and select "Acorn Wizard". When the screen below appears, Press "Update Wizard"

Mill CNC Control Configuration Wizard			-	
Primary System Axis Drive Type Input Definitions Output Definitions				
Axis Configuration Homing and Travel Axes Pairing Advanced	CNC Control Configuration Wizard Warning: X A change was detected! The Wizard failed to load a PLC configuration that matches the current Wizard settings.			
Spindle L <sub>Setup</sub>	Typically this is caused when updating from a previous version of software using "Restore Report" in CNC12, or when using a Custom PLC program that was edited outside of the Wizard.			
Touch Devices Probe Tool Touch Off	"Update Wizard w/custom PLC in use". When restoring a report.zip that contains a custom PLC program choose this option, the CNC configuration will be imported into the the Wizard and the Wizard will allow changes to the CNC12 configuration to be written but, will not overwrite the Custom PLC program. When Choosing "Update Wizard w/custom PLC in use" the Wizard Primary Systems Menu (inputs and outputs and drive types) will not be accessible and the Wizard will not automatically generate a PLC program.			
Control Peripheral L Input Devices Wireless MPG	"Update Wizard" When updating from a previous version, click "Update Wizard" and the previous version CNC configuration and PLC program and Drive Type will be imported into the Wizard automatically and allow any and all changes (if necessary). Support for this feature starts with report files from v4.18. Older report.zp files may not automatically update. The previous version Drive Type settings will import and be labeled "Previous			
DB25 Connector L <sub>Mapping</sub>	Version" under the Custom Drive type tab and are still editable along with all the other Wizard settings. Be sure 2 to Press "Write Settings to CNC control configuration" after this Wizard update and follow the instructions on the screen to complete the update process.	ard!		
Preferences CNC Control Wizard	If you have received this window unexpectedly, close this window and the Wizard, restore a backup report.zip file from the last known working CNC configuration OR reinstall CNC12.			
Connected to CNC12	Write Settin	igs to CNC Control C	onfigura	tion

Page 3 https://www.centroidcnc.com/centroid\_diy/downloads/acorn\_documentation/ acorn\_cnc12\_v4.64\_install\_instructions.pdf

12-2-21

then.... BE SURE to press "Write Settings to CNC control" and follow the instructions on the screen to finalize the configuration settings...follow the instructions on the screen.

Notes:

- **BETA program participants:** If you participated in the Beta program, be advised a beta report.zip can not be used to update to the release version.

- When using a heavily customized PLC program it is best to edit the wizard generated 4.64 plc program with those customization's and recompile. This way the system will have the new features added to 4.64 and the customizations made previously to the PLC.

## CNC12 v4.64 Router upgrade installation instructions.

1.) Make screen shots of existing Acorn Mill Wizard with the Windows snipping tool.

2.) Follow the new installation instructions above. Use the Acorn Router Wizard to set up the system using the information in the screen shots made in step 1.

Note: DO NOT use the "Restore report" method, do not use a Mill (or Lathe) "report.zip" file with Router CNC12. CNC12 Router requires to be setup with the Wizard as a new installation.

## PLC programs

1.) If using one of the Centroid provided ATC PLC programs be sure to download the latest versions here that match v4.64 http://centroidcnc.com/centroid diy/downloads/acorn cnc software/acorn v4.60 ATC Programs.zip

2.) 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 v4.64 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 always show up with 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.