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

New Documents related to v4.6 can be found in the link above...they are...

- Acorn Wizard Input and Output canned PLC functions

- Acorn v4.6 release notes

- Acorn v4.6 CNC12 parameters

- Laser Sync Test Instructions and example laser files are included with the v4.6 installation.

- v4.6 ATC program with instructions

- v4.6 Acorn hookup schematic set

Acorn CNC12 new 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 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.
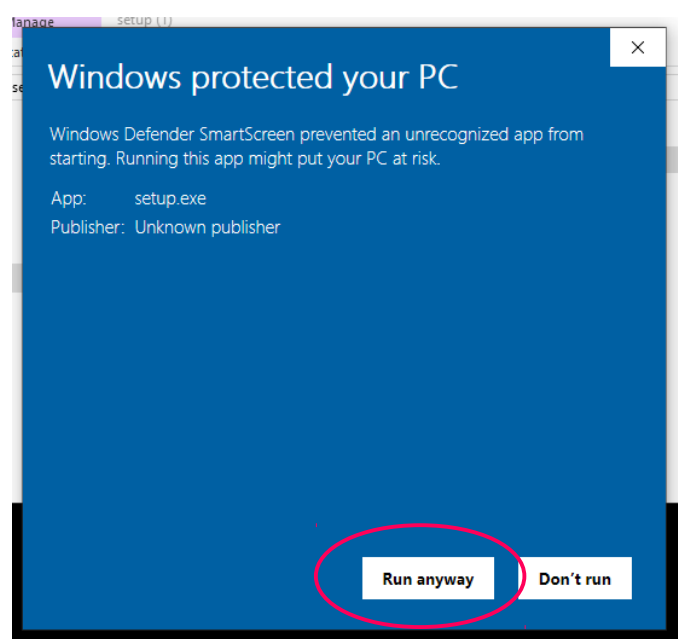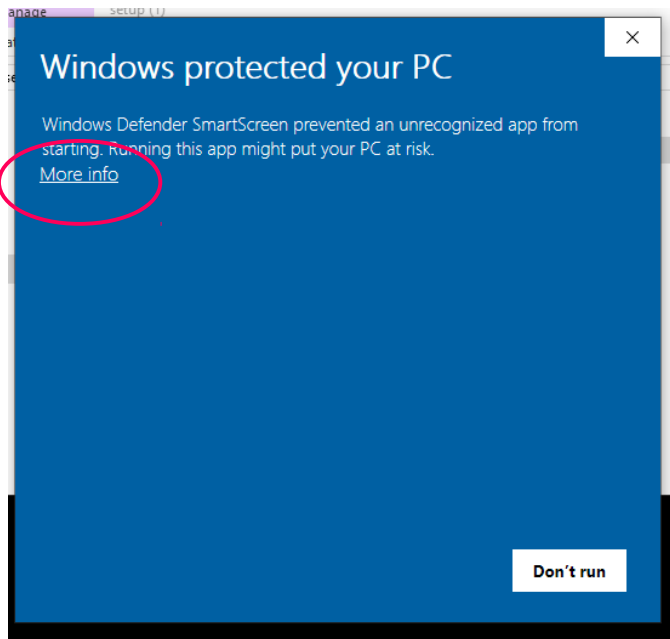
And follow the instructions on the screen to install CNC12.

4.) <u>With the Acorn up and running with a heartbeat connected in BENCH TEST configuration (Bench test is nothing more than power to Acorn and rj45 cable connected to CNCPC)</u> 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. <mark>BE SURE to press "Write Settings to CNC control" and follow the instructions on the screen to finalized the configuration settings.</mark>

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 v4.6 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 Mil Upgrade.

Note.   v4.6 introduces a new version of CNC12: CNC12 Router.   All installations of v4.6 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 V4.6 Router.

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

b.) 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.
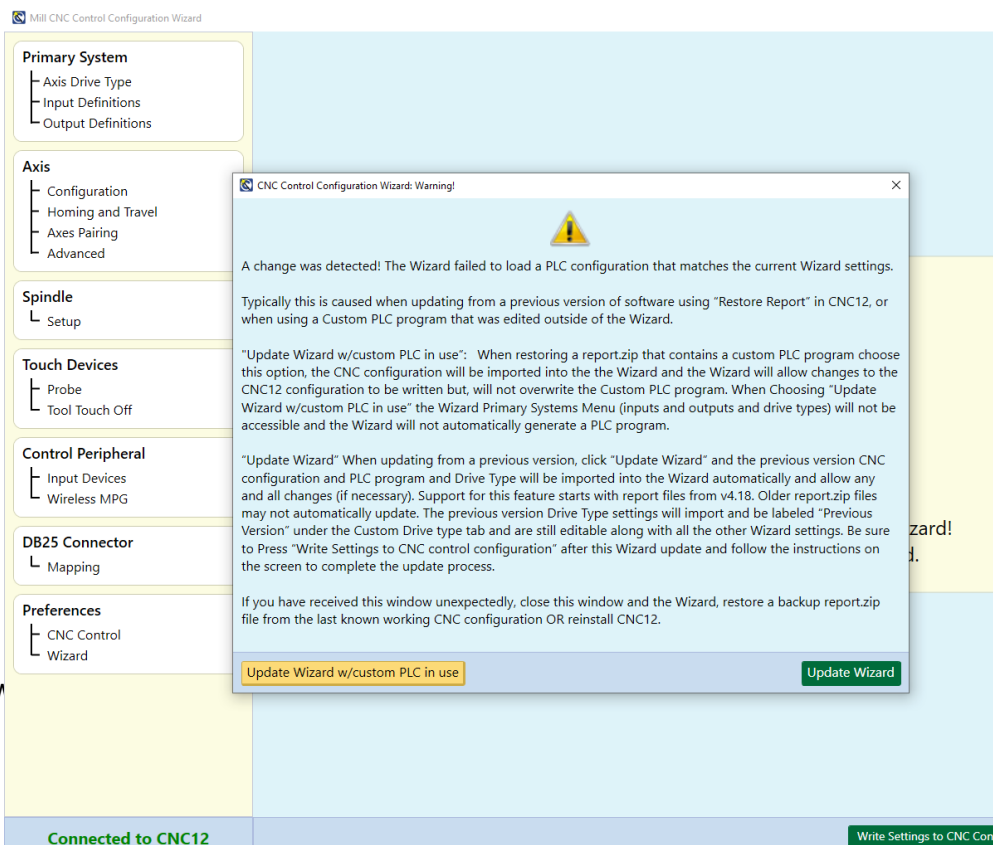
c.) Follow Steps 1-4 above, Navigate to the CNC12 Utility menu and select the "Restore Report" button, and <u>restore the report.zip file made in a.)</u> and follow

instructions on the screen. Navigate to the Utility menu and select "Acorn Wizard" button, <mark>Press "Update Wizard" to continue.</mark>

d.) Now, verify the Wizard has successfully read the cnc control configuration from the restored report.zip by looking through the Wizard menus and <mark>BE SURE to press "Write Settings to CNC control" to finalized the update</mark> and follow instructions on the screen to power cycle Acorn and CNC12.

Update with 'restore report' Notes:

- If you get the update wizard pop up menu and you have customized your PLC program be sure to select "Update Wizard w/custom PLC in use" and the wizard will not overwrite the PLC program from this point forward, you can still edit all the other non PLC related wizard settings as much as you want!

- If you are updating from 4.20.1 or v4.5 and already have had "Custom PLC program in use" selected in the 4.20.1 / 4.5 Wizard then you will NOT see the Update Pop up menu above when you use restore report and start the Wizard! All the non PLC Wizard settings will automatically be updated from the information contained in the 4.20.1 / 4.5 and the custom v4.20.1 / 4.5 PLC will be used!

- Copy over all your G code programs from the backup up directory (cncm/ncfiles or cnct/ncfiles to the new one if desired.

- Copy over all your Intercon programs from the backup up directory (cncm/ncfiles or cnct/ncfiles to the new one if desired.

- When updating from v4.20.1 and older versions...The new VCP has more buttons on it than the VCP previous to v4.5. So, the VCP Auxiliary key assignments have changed since there are more of them. If you had any custom VCP Auxillary key assignments in the old version, those assignments will have to be made again for v.4.5.   A new VCP Auxiliary key menu has been added into the Wizard to facilitate easy reassignment of macros to Auxiliary keys on the VCP if necessary.

Alternatively, sometimes its just easier to edit a preassigned macro with the custom macro code and leave the Aux Key assignments as is. Either way works.

See the VCP installation manual for instructions.
https://www.centroidcnc.com/centroid_diy/downloads/centroid_vcp_users_manual.pdf

- v4.6 will not recognize your 4.18 and older drive type directly.. so what it does..is it brings the drive type in and labels it as "Previous Version" Drive Type it still remembers the data and it is still editable.

CNC12 v4.6 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 Router Wizard to set up the system using the information in the screen shots made in step 1.

Note: <mark>DO NOT use the "Restore report" method,</mark> do not use a Mill (or Lathe) "report.zip" file with Router CNC12.   In future versions of CNC12 Router, updating will be a simple matter of using 'restore report' but for this very first version (v4.64) CNC12 Router needs to be setup with the Wizard as a clean fresh install (not using the restore report method).

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.

A report.zip from the previous official release version (even number versions numbers) however will work, Mill to Mill, Lathe to Lathe (do not use a mill or lathe report.zip with CNC12 Router)

PLC programs

1.) If you are using one of the Centroid provided ATC PLC programs be sure to download the latest versions here that match v4.6   http://centroidcnc.com/centroid_diy/downloads/acorn_cnc_software/acorn_v4.60_ATC_Programs.zip

2.) If you are 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) you have two choices.

a.) Hand edit the v4.6 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 your 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 on a v4.20.1 report.zip (and any future reports to future releases)

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.