

Acorn CNC12 v4.5 release notes

- fixed vcp resizing dots disappearing bug
- fixed vcp options saving and loading bug
- rewrote how the VCP communicates with the PLC to be compatible with a upcoming windows 10 update.
- made improvements to VCP related to an upcoming microsoft win10 release
- made improvements to graphics flickering anomaly in probing menu when you unplug the probe and stay in the menu.
- Added "Custom VCP Skin Yes/NO" slider to CNC Control Preferences in the Wizard. Select Yes if you plan on customizing the VCP and the Wizard will not overwrite any of your modifications.
- Added Parameter 12 to fix Lathe Auto Tool Measure ID bore Z offset bug. Default setting should work for most users, if not change from 1 to 0 to flip the sign of the measurement so the proper value is calculated.
- Improvements to VCP base code to make it compatible with latest Windows 10 update.
- Added new feature "Dry Run" to Lathe. Basic testing has been performed, more testing is needed, please give it a go and report back!

Dry Run operator notes: Acorn Lathe: Dry Run

- Dry Run is a Lathe feature where you can test run a program without material in the spindle.
- Dry Run mode gives you the ability to run the program in air to check that tool offsets are set up correctly before cutting material. NOTE: All tools in the program need to be set before running Dry Run.
- In Dry Run mode all G0, G1, G2, G3 moves are run at a preset feedrate of inches per minute (mm per minute) whether or not the program was written in feed per rev or feed per minute.
- In CNC12 parameter screen (F1 – Setup, F3 – Config (Enter password if required), F3 Parm, page to the next table to setup Parameter 128 and 129. Set parameter 128 to 61132, set parameter 129 to 15 for inches per minute or 380 for mm per minute or a feed rate that you feel comfortable running at for Dry Run.
- Spindle does run but can be turned off once the program starts by pressing the Red spindle off button on the VCP or the MPG. NOTE: The spindle does have to run for the Tapping cycle (G84) and the Threading cycles. The feed moves in the tapping cycle and the threading cycle will be at the programmed feed per rev at the programmed spindle speed if there is an encoder on the spindle. Have not tested this for a lathe with no encoder on the spindle.
- In Dry Run the feedrate override can be used to decrease the preset feed rate for Dry Run or increase the feedrate to the allow percentage override that is set in Wizard.
- In Dry Run like when running a program it is the operators responsibility to watch the moves to avoid a crash.
- If the tools will be close to the chuck it is suggested that Part Z0.0 be set a safe distance from the chuck on the first run and after making any changes to the program
- You can turn Dry Run on before doing a Run Search for a tool number, N number or line number. You can enter Run Search, enter the tool number, N number or line number and before pressing Cycle Start turn Dry Run on.
- If you are running a program you can not turn Dry Run on or off until the program has stopped by canceling or at a tool check.
- Dry Run on a manual tool change machine at a tool change by pressing Tool Check Dry Run can be turned on or off at a tool change. A lathe with a turret the program would have to have a program stop at the tool change then pressing Tool Check to turn Dry Run on or off.
- Lathe Auto Tool Measure bug for ID BORE X offset has been fixed.
- Lathe Copy G code from USB drive 913 error has been fixed.
- misc message improvements
- misc minor wizard UI/UX improvements
- User Editable VCP (VCP 2.0) see Users manual.

https://www.centroidcnc.com/centroid_diy/downloads/centroid_vcp_users_manual.pdf

- Mill Pro License now includes all the menu driven Probing cycles and CSR
- Wizard axis labels only allow X,Y,Z or N for axis 1,2,3 for Mill. And Z,X or N for axis 1,2 for Lathe. (you can still label them in cnc12 config menu as normal)
- Machine Coordinates mini DRO added
- Wizard password protection added. Uses same password as CNC12 config menu.
- reworked Active G codes layout for easier UX
- Added Aux key assignment menu to the Wizard
- New Wizard stock inputs and outputs added
- Added vcp indicator light button functionality image swap based on a PLC input or memory location
- CNC12 UI Redesigns:
 - changed the ui of the run menu, active line of g code in bold, history gcode in white
 - changed up the active gcode
 - add images of the state of the probe in the probing menus
 - changed the spindle speed and feedrate line color green 0-100, orange 101,120, red 121-200%
- Fixed issue of users being able to set feedrate using G99 over the max rate of machine
- fixed probing menu showing upgrade to pro when user is upgraded to digitizing pro
- add the ability to use plc inputs for vcp button led state
- fixed AuxKeys page overwriting aux10key when axes pairing is enabled
- cnc12 can be closed by right clicking on taskbar (edited)
- added skin event numbers to wizard aux key configuration menu for clarity
- Fixed Logic for Outputs that were activated with both VCP and M-codes.
- Cleaned up some unused Memory Bits and incremented INP for Aux13-16 Keys by 1 to match Aux13-16 Key OUTs.
- Fixed VCP screen sizing issues with non 1920x1080 resolution screens
- Added Initialize_T Logic to prevent Outputs from turning on and off during boot up.
- added various error codes to vcp
- fixed issue of g03 code has 2 axes and a angle tells users to upgrade to pro
- Fixed bug where the wrong minimum position increment was used when the control units of measure was not the same as the parsing mode (G20/G21).
- Added "Legacy" VCP for users who wish to use Custom PLC's from Versions 4.20.1 and earlier. Added Legacy versions of updated function buttons such as Rapid over and Brake Release.
- the wizard can now swap the new default vcp to the old legacy vcp skin with a custom plc program