TB000 (Rev8) - Software Update Highlights

See release notes for more detailed and minor changes.

* Optional Feature

<u>Windows CNC 11</u>

<u>v3.16, 08-24-2016</u>

Implemented Precision mode standoff error correction

Implemented MPG Encoder Error messages

Added support of M115/M116/M125/M126 when using paired axes

Implemented G76 Fine Bore canned cycle

Unlocks can be imported from a file in the Software Add-ons menu

Added support for AC/DC drive RPM mode

Added system variables to support "skinning" feature

<u>v3.14, 05-13-2015</u>

Added support for load meters in Velocity or Precision mode

Cutter Compensation supported on all 3 planes, G17, G18, and G19

Implemented Axis Reassignment, M333

Implemented G73 Profile Path Repeat Cycle

G-code parser accepts alternate Industry Standard 1-line formats of G71, G72, G73, G74, G75 and G76

Added Manual Axis Parameter, 259

Added Scales Feedback and Axis Pairing unlocks

Implemented Machine Timers

Added support for OAK board

Added support for ENCEXP board

Fixed "Fatal Exception Error" bug when trying to go back into Intercon

<u>v3.12, 12-18-2013</u>

File encryption utility added

Added encoder filter speed parameter to minimize random encoder errors

Fixed bug in which the GPIO4D would enable and output -10V at powerup

Added parameter that would allow you to invert the logic of an input and force an output on or off

<u>v3.10, 05-02-2013</u>

Implemented Tool Life Management library

*Added TT2 support for Lathes

*Added Surface Following Digitizing option

Added support for ACDC drives

Added support for legacy hardware

v3.08, 08-29-2012

New Lathe Tool Setup menu

Precision Mode support w/ OpticDirect

Added support for 7th and 8th axes

Renamed some F-buttons in the Utility menu

v3.06, 02-01-2012

*Re-enabled Radial & CAM digitizing

Update button in the Utility menu is no longer looking for install.sh or install.bat, just report.zip

Removed screen blank delay since it is Windows7 OS

*Enabled Scale Setup menu for Lathe

Added support for RTK4

Added rotary axis jog increment, parameter 41

v3.04, 05-20-2011

Live PID tuning for 3rd Party drives

Added PLC Detective (WinPcap) for PLC diagnostics and trouble shooting

Improved loading speed of files in file menu's

*Removed Radial & Contour digitizing and replaced with Wall Following digitizing

*Implemented DP7 probe support

v3.02, 09-09-2010

Support velocity mode drives

LINUX CNC 10

v2.70, 09-08-2010

Implemented "Classic" Cutter Comp to correct some issues with Cutter Comp.

New AD2 smoothing implemented to allow high speed routers to run faster and more smoothly

Rotary increment feature added to Intercon

Software unlocks are now entered from F8-Options screen instead of the Parameters menu

v2.68, 04-01-2010

Standard program file size increased from 1MB to 4MB

Work Coordinate Systems now comes with 6 work coordinates instead of only 1 (Extended WCS can still be purchased to get the full 18 WCS)

The following options have become standard features (no unlock required): Cutter compensation, Drilling Cycles, Compression Tapping, Multi-range Spindle, Spindle Speed, Laser Compensation, 4th Axis, and Subs & Macros

Expired Demo mode no longer completely locks you out of the software, now you can navigate the software, but you cannot run a program

v2.66, 12-15-2009

Graphics acceleration added to g-code back plot as well as mouse support

P123 added for lathe software to smooth handwheel movement

Simultaneous contouring (unlock feature) added

v2.64, 01-20-2009

Added F-key shortcuts to Nedit screen to make editor easier to use

v2.63,11-05-2008

Remote Access and Diagnostics for remote viewing and file transfer.

Angle probing cycle to automatically calculate an angle from 2 probed points.

Added 3 new foreign languages. German, Swedish, and Finnish.

v2.61h,4-29-2008

Hex file change to remove dynamic braking and reset over current messages

Reset PLC whenever CNC10 is started

v2.61,3-4-2008

Remove debug output to prevent using up disk space

Changed Advanced Load Menu Rename prompt

v2.60,2-22-2008

New Linux Kernel version 2.6.x requiring new Flash Card

DosBox/Millwrite support for online engraving

DSP Probe

Improved Laser Compensation

v2.38,5-27-2008

Hex file update for 2.4.x Linux Kernel to change overcurrent handling on AC systems

v2.36,9-12-2007

Inverse Time Parsing for CNC10 mill

Command line history for MDI

"318 _axis too close to switch" Error removed

v2.32,2-06-2007

Simplified File Operations

On-Screen Help System

Graphing Intercon files from Load Menu

v2.30,7-28-2006

Changed File Operations

Paired axis resynchronization

v1.51,12-22-2005

CPU10b Support

Enabled multi-axis, protected-move probing functions

New CNC editor (NEdit)

v1.27,9-21-2005

Added location chooser for Updates & Reports in Start Menu

v1.25,8-03-2005

Spiral cleanout replaces Zig Zag cleanout in Intercon

Island avoidance added to cleanout cycle in Intercon

Z axis MPG mode during job run

Added wait for Spindle At Speed

Added M150 to zero spindle encoder at index pulse

Updates, reports, and backup/restore in Util Menu use the location chooser

WCS 7-18 viewable and editable in WCS menu*

v1.21,2-10-2005

Added P148 for fast jogging before home is set

v1.20,1-06-2005

USB Support

Linux Serial Communication

DXF Engraving*

v1.15,9-30-2004

High Resolution Display

Lathe one shots

Improved Lathe Intercon Thread menu

Chinese Translations

v1.11,7-20-2004

New French Translations

v1.10,7-16-2004

DXF Import*

System Test

Improved Keyboard Jogging

Joystick jogging support

Probe detection while jogging

Dwell time added to groove and turning cycles

Drag plot improvements

5th axis pairing

G22/G23 work envelope soft limits

21 day demo

v1.02,05-13-2004

Background Editing

v1.00,03-25-2004

First release of Linux CNC10

CPU10 (PCI Card) Support

New G-code editor

Multi-tasking operating system

Shutdown Menu

DOS CNC 7

v8.23,6-25-2004

System Test

Improved Keyboard Jogging

Probe Detection while jogging

Dwell time added to groove and turning cycles

Joystick jogging support

Drag plot improvements

5th Axis Pairing

Last Dos CNC7 Release

v8.22,2-24-2004

G68, G69 Rotate G-codes Added

Aux Key M-Function Execution Added

New Custom PLC Messages (See TB164)

v8.21,8-11-2003

Lathe Tool Details Screen

v8.20,6-05-2003

5th axis support

2 axis INTERCON MILL

Aux key functions & One Shots

Enhanced keyboard jogging

Dual MPG Handwheels with improved MPG responsiveness

Distance to go DRO

INTERCON MILL Help

v8.11, 1-24-2003

Keyboard Jogging

Live PLC Debug

Grid Digitizing Speed Improvements*

Teach Mode with Live DRO

File Caching

User Specified Paths

New INTERCON Translations

Input Macro

v8.10, 12-10-2002

Run – Time Graphics

Parse Error Display

Conditional G Codes

Brushless Autotune

Lathe Gang tool Support

Modal Feedrate, Plunge Rate and rough Feedrates

Manual Coordinate System Rotation*

Drill Arrays and Repeats

Distance Chamfer

v8.03, 9-4-2002

Random Access Tool Changer*

v8.01, 7-24-2002

Automated Part Count

Block Skip

Rapid Override on F9 Key

v8.00, 5-19-2002

Coordinate System Rotation*

Irregular Pocket Cleanout

Axis load meters

Intercon integration

Actual Speed Display

New Digitizing Cycle, "Cam Copy"

v7.53, 5-19-2002

CAD Vector Preprocessor*

Inch Precision on Lathe's DRO Expanded to 5 Digits

v7.50, 12-4-2001

Lathe C Axis *

Custom Probing Macros (M115, M116, M125, M126) *

Data Logging Macros (M120, M121, M122, M123)

Error Message Logging

CAM/Wall Following Digitizing Cycles *

Z Axis Scale Summing

Bi-Directional Laser Compensation *

Arithmetic Functions in G-Codes and User Variables

v7.15, 10-8-2001

Rotary Axis' Feedrate Slaved to Non-Rotary Axis

v7.14, 9-28-2001

Enhanced Rigid Tapping *

No Limit Homing

F10 - Park to Main Menu

Lathe G83, G84, and G85

Positive and Negative Travel Limits

v7.08, 4-13-2000

Extended Work Coordinate Systems *

Semi-auto and Batch Tool Measurement

v7.07, 1-28-2000

Tool Number Search

v7.00, 5-21-1999

Conversational Lathe Capability

Fourth Axis Pairing Implemented

Parking Meter for Mill and Lathe

v6.02, 11-4-1998

Grid Digitizing Speeded Up *

French and Chinese (ROC and PRC) Languages

Rigid Tapping (G84) Cycle *

Lathe Clean Out Cycles G70, G71, and G72

v6.00, 6-5-1998

Smart Search – Program Restart

Drag MapTM

Leadscrew Error Compensation *

Look-Ahead Cutter Compensation

Toolpath Machining Time Estimate

Single Axis Probing Cycle Added *

v5.27, 9-26-1997

3D Arcs: Pipes, Bowls, Elbows

v5.24, 4-4-1997

Radial and Grid Digitizing Added *

Rotary Axis Support, degrees

5.20, 7-1-1996

Tool Path Graphics with Cutter Compensation Display

v5.19, 6-26-1996

Mirror and Scaling G-Codes *

Multiple Patch Digitizing Added *

v5.18, 4-25-1996

Engraving Software *

v5.14, 1-24-1996

Multiple Languages *

v5.13, 1-6-1996

Probing Cycles *

v5.12, 11-10-1995

Three Point Arcs

Motor Temperature Estimation

v5.10, 8-4-1995

Digitizing *

Teach Feature

Copy, Repeat, & Mirror Routines

v5.00, 5-24-1995

Work Coordinate Systems *

Software Travel Limits

Lash Compensation

New User Interface

v4.12, 4-20-1995

Repeat-to-Depth Routine

v4.00, 11-9-1994

Tool Check

Tool Library Access in GGE

Canned Drilling/Boring Cycles

Part Timer

v3.24, 8-2-1994

Spindle High/Low Range *

v3.21, 7-6-1994

Subroutines and Macros *

v3.20, 5-2-1994

Tool Changer Support *

Document History

Rev8 Created on *2016-11-22* by *#270*
Rev7 Created on *2015-06-22* by *#270*
Rev6 Created on *2014-02-17* by *#270*
Rev5 Created on *2012-10-01* by *#270*
Rev4 Created on *2011-11-01* by *#240*
Rev3 Created on *2010-01-19* by *#240*
Rev2 Created on *2008-09-30* by *#297*
Rev1 Created on *2007-09-12* by *#000*