# Test Release Changes KFLOP/KMotion Versions 4.33a -> 4.34b 10/03/2016

## **KMotionCNC Screen Editor Added!!**

See Video

https://www.youtube.com/watch?v=I6d\_AYTptVQ

# **General**

Installer Changed to install .NET 4.62 and VS2015 redistributables if not detected as required for .NET Examples including KMotionCNC Screen Editor

### **KFLOP**

Protect against Program User FLASH wrap around causing loss of Boot sector (Brick KFLOP)

# **KMotionCNC**

New Screen Script Action for User Buttons may now invoke Screen Script files

GViewer Ortho/Perspective View Option

Access Tool Setup Screens from Right Click Title bar

KMotionCNC Command Line Profile Specification with new /c filename option

Fix Large Jog Step Abort functionality

Default Directories Changed for Setup, Vars, and Tool Table to local Data Directory to make upgrading easier

Tool Image Preview Folder Change Bug fixed

Added message GUI Button waiting on C Program taking a long time to complete.

Fix Bug regarding P Q R GCode words passed inappropriately to persist variables for User Button Actions

Some dpi awareness added helpful for use with 4K Monitors – Button bitmaps scaled appropriately

Transform G-Code handles larger size and reports errors

Fix issue with GViewer Halting in Metric mode with Tool selected with non-zero tool length

Set Next Line Resume Issues Fixed issue #

Fix Issue with Set Next Statement starting with improper G0 mode

Fix "step" button for angular axes to be in degrees when appropriate

Restore Gamepad Run/Halt button functionality

### **KMotion.exe**

Update Step Response Plot automatically whenever new Data is loaded

Fix Configuration Screen cell formatting

# **Coordinated Motion/Kinematics/Trajectory Planner**

Fix Trajectory Planner/Segment Buffer Bug when first segment requires multi-pass look-ahead optimization and cannot be optimized on first optimization pass resulting in no motion until segment buffer wraparound and consequently large quantity of lost motion and large discontinuity. Basically when no rapid and complex trajectory path at the very beginning of motion. Likely to occur when using "Set Next Statement" into an area of short segments.

Fix Kinematic (CAD Space vs Actuator Space) Soft Limits (negative/positive reversed)

#### **Dynomotion VB.net Example**

Fix Clear abort between subsequent runs

Limit the amount of Status displayed on the Screen rather than growing indefinitely in size

#### SimpleFormsCS Example

Update Example of KMotionCNC Automation Open GCode File to pass a Unicode String

#### **TCC67 Compiler**

Fixed Compiler problem when converting double to integer only first 20 bits of resolution was used instead of up to 32

Fixed Compiler problem when converting double to float only first 20 bits of resolution was used instead of up to 32

Fixed Compiler problem when converting unsigned integer to double was actually doing signed conversion

### **KFLOP C Program Examples**

Added KFLOPGetEditControlDouble.c Screen Designer KFLOP from KMotionCNC screen controls

Added KFLOPGetEditControlText.c Screen Designer KFLOP from KMotionCNC screen controls

Added KFLOPtoDROLabelTest.c Screen Designer KFLOP to KMotionCNC screen controls

Added Add.c Screen Designer C Program Add Demo/Example

Properly include "CS0\_Flushed=TRUE;" in the Coordinated Motion Examples

Added ReExecuteCoordMotionBuffer.c (how to re-execute coordinated motion segments from KFLOP that were previously run from Host).

Fix Bug in Home Slaved Example

Fix Bug/Simplify \FlashNonVolatile\ReadSavedData.c

Added HobbyServoPWM.c to control RC type hobby servos

Added DetachStepDirGeneratorsFromGPIO.c

#### **GCode Examples**

GCode Example of G41 Tool Radius Compensation in internal (concave) corners

# <u>Help</u>

Update 458 Page Printable PDF Manual to 2016 equivalent of V4.33

Mach3 Swap order of steps 6 and 7 of procedure

Added Mach3 setup description of how to Enable Axes in Config Ports and Pins and disable EStop