### Test Release Changes KFLOP/KMotion Versions 4.34j -> 4.34k 1/13/2018

#### **KFLOP**

Fix issue with false auto-detection of Kanalog due to noise on boot up

#### **Trajectory Planner**

Fix Bug with corner rounding with mixture of pure Angled Moves with non-pure Angled moves

## **Kinematics**

Add 5AxisTableAC Kinematics

Add 5AxisGimbalCB Kinematics

Fix Kinematics RTCP Metric Tool Table bug

# **KMotionCNC Screen Editor**

Hotkeys now support Momentary mode for FeedHold Forward/Reverse and other buttons

If the MDI control or the Send Button aren't visible then don't execute MDI on Enter

Add button to check for same Hot Key assigned to multiple controls

Interpreter InvokeAction now uses Worker Thread for calls from buttons to release GUI Thread. This allows C Programs called from Use Buttons to perform GUI operations such as MessageBoxes

## **C Program Examples**

Snap Amp 2 Stepper Example - \SnapAmp\SnapAmp 2 Steppers.c

KNozz C Example Controls Heaters, Calibrated Temperature, MCode to set Set Points \KNozz\KNozzControlTempsMCode.c

Added KNozz Analog Spindle Example \Knozz\Spindle\_S\_KNozz.c

Added MPGServiceSmoothHardwareEncFiltered.c – 3rd order low pass filtered Steps for much smoother operation

## **KMotionCNC / Gcode Interpreter**

Add Unary Negative to GCode Expressions that do not require brackets

Fix "Error Executing GCode" when Halting while Interpreter finishes.

Add G43.4 to turn on RTCP G49 turns off

Fix Rigid Tap Feedhold/Resume Issue

Fix KMotionCNC Jog Step Button having inadvertent effect on UV axes

Spindle SRO Scroll Slider only sends SRO and Spindle Speed if not busy or Scroll Released for smoother scrolling

### .NET

Fix bug regarding GetUserDataDouble() when persist variables are negative integers

C++ / .NET Libraries fix set GCode Interpreter Set Origin Offsets regarding Index=0 for G92 Offset

Expose GCode Interpreter Worker Thread ID so .NET Libraries can avoid throwing Exceptions that will not be handled

## **Dynomotion VB.net Example**

Fix VB Coordinated Motion Buffer Example Screen Label from "Execute Now" to more appropriate "Add to Buffer"

# **PureC**

New Pure C++ Example that calls KMotion\_dotNet\_Interop Library directly with C calls without any MFC requirement. This technique can be used with Borland C where MFC and .NET aren't supported.

### **SimpleGCodeWPF**

New Simple C# WPF .NET Example – shows Simple methods to Launch/FeedHold/Halt/Abort GCode with Status and Exception handling.

### **Extended Logging Example**

Converted markdown readme to pdf for more convenient reading

## <u>Help</u>

KMotionCNC - Updated the "Using Multiple Configurations" section

KMotion - Changes to the "Configuration and FLASH screen": Replaced "KMotion" with "KFLOP" (or KMotion.exe), new screenshots etc.

KNozz Fixed J1 Label

Correct and add wording on KNozz Analog Output

Update Kanalog RS232 Status

Fix typo on GCode Quickstart menu regarding G96/97

Corrected a paragraph in the "Preemptive Multitasking" section.

Updated 4-axis to 6-axis (MoveX,Y,Z,A,B,C)

Corrected "SoftLimPos" and "SoftLimNeg" to "SoftLimitPos" and "SoftLimitNeg"

.NET Help File Updated