Adding Display Encoders cell to Main Dialog Face

Using Visual Studio 2008

First verify you can successfully re-build KMotionCNC from source code:

#1 - install VS 2008

#2 - open the "solution" called <>\PC VC Examples\BuildExamples\BuildExamples.sln

#3 - Right click KMotionCNC and set it as the "Start up" project

#4 - set the Build Configuration as "Release"

#5 - From the Build Menu select "Rebuild KMotionCNC"

#6 - if successful push F5 to run KMotionCNC

#7 - exit KMotionCNC

To Change a screen:

#1 - from the View Menu select Resource View

#2 - Open KMotionCNC | KMotionCNC.rc | Dialogs

#3 - double-click a Dialog to change ie IDD_KMOTIONCNC_6_LATHE_2_AXES

#4 - visually select cells to move/resize or change the cell's properties

#5 - push F5 to compile and run the changed program

Adding cell and Code Steps

1) Select and copy Display Encoder cell from ToolSetupTPPage.
2) Paste on Main Dialog Face.

3) The line of code:

   DDX_Check(pDX, IDC_DisplayEncoders, m_DisplayEncoder);

   will need to be copied from ToolSetupTPPage.cpp (C++ file that handles the Tool Setup Trajectory Planner Dialog) to KMotionCNCDlg.cpp (C++ file that handles the main KMotionCNC Dialog).

   The above line of code associates the ID of the screen cell to a BOOL variable in the dialog class. Both Classes happen to have a variable with the same name. And if you copied the screen cell it will probably have the same ID or a number added to it. The Original ID that is copied is IDC_DisplayEncoders, m_DisplayEncoder. When you copy the cell and paste it VisualStudio2008 will add a number to ID like this IDC_DisplayEncoders2, m_DisplayEncoder. Make sure the ID matches the ID of the new cell you pasted.

   Note:Previously closing the Tool Setup dialog page with "OK" has code to copy the variable's value from the Tool Setup dialog back into the Main Dialog for actual use. The OK event handler will "UpdateData" to then transfer all the data from the screen cells to all the member variables. However in this case we want checking the Show Encoders checkbox to have an immediate effect. So a Message Event must be added and a function must be added to make an Update Data call. Furthermore to add any function to a class, the definition of that function must be added to the class definition in the class header file. Hint you can model all the changes to do things the same as the current Show Machine Coordinates checkbox does. Next steps is what must be added to allow this function.

4) In the KMotionCNCDlg.h file, after afx_msg void OnShowMach(); add a function declaration called:

   afx_msg void OnDisplayEncoder();

5) In the KMotionCNCDlg.cpp file, after ON_BN_CLICKED(IDC_ShowMach, OnShowMach) add a message event as:

   ON_BN_CLICKED(IDC_DisplayEncoders, OnDisplayEncoder)

6) In the same KMotionCNCDlg.cpp file, after the function:

```
void CKMotionCNCDlg::OnShowMach()
{
   UpdateData();
}
```

   add the function:

```
void CKMotionCNCDlg::OnDisplayEncoder()
{
   UpdateData();
}
```

7) Click Save all and Rebuild KmotionCNC from Build Menu. Refer to Using Visual Studio 2008 on page1.