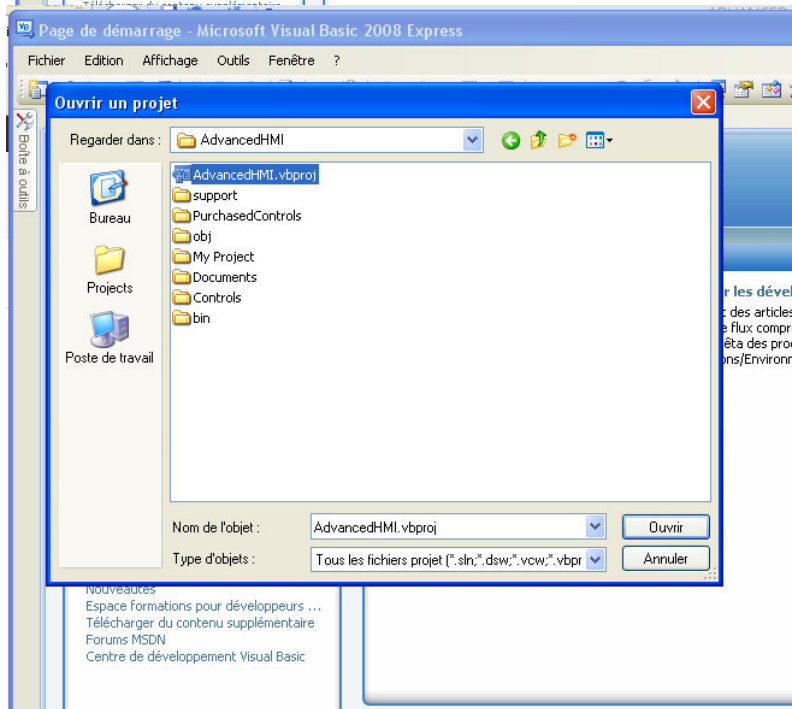
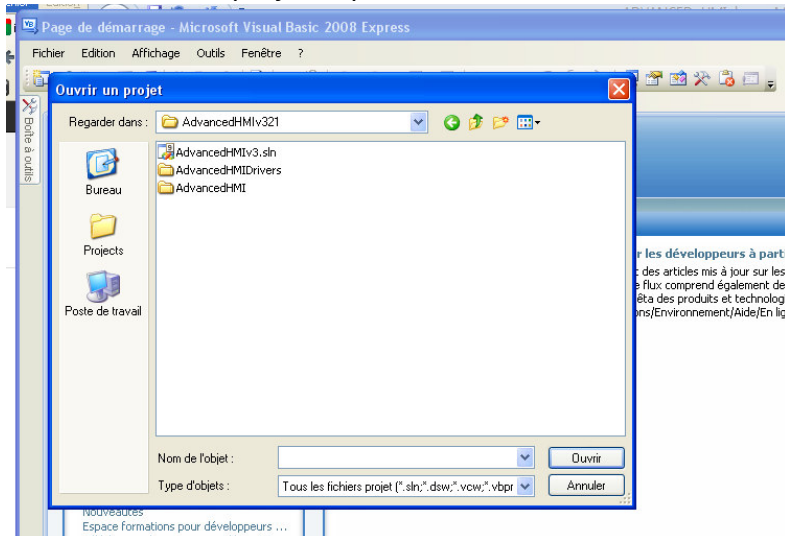


ADVANCED HMI

Lancer AdvancedHMI :

Lancer Visual basic express 2008 :

Fichier/Ouvrir un projet/repertoire AdvancedHMI



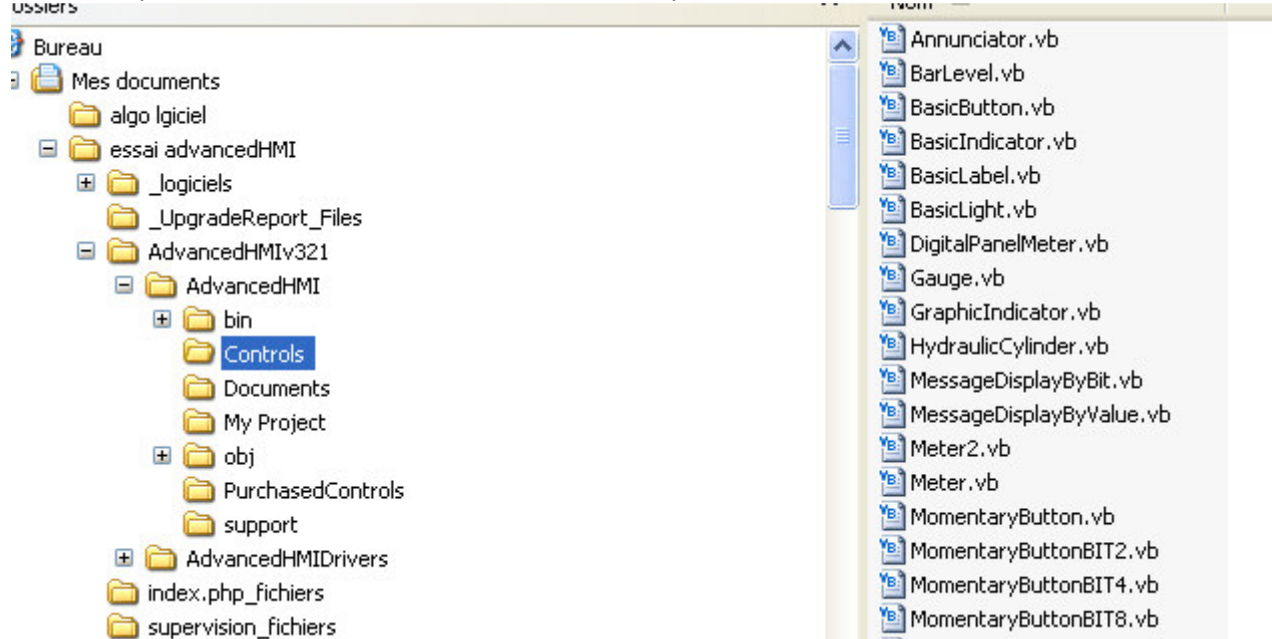
Ouvrir.
Générer/



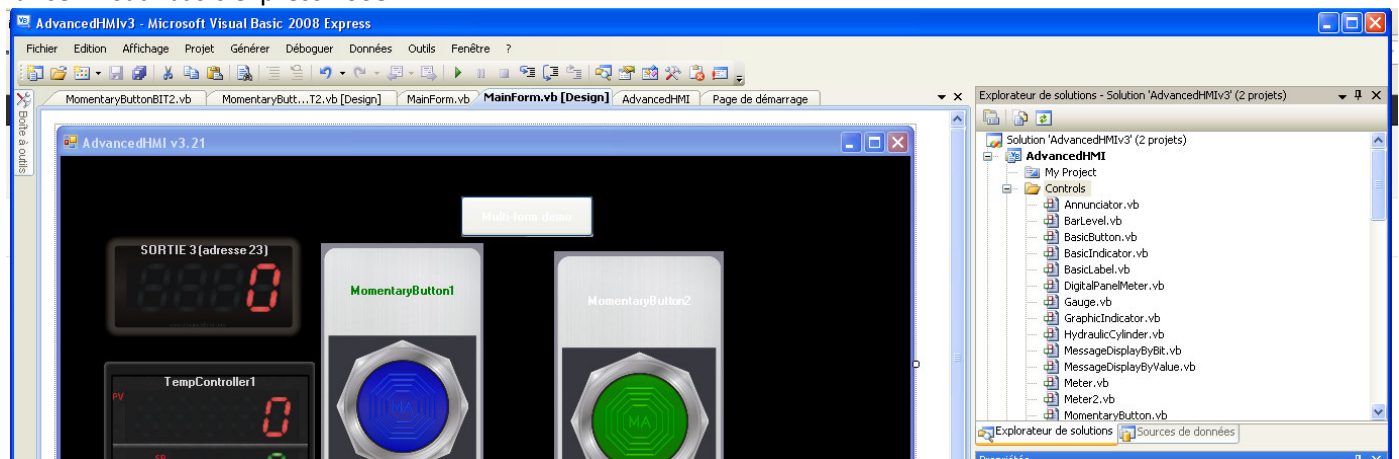
Les différents objets ont été générés dans la boîte à outils.

Modifier et ajouter un nouveau composant :

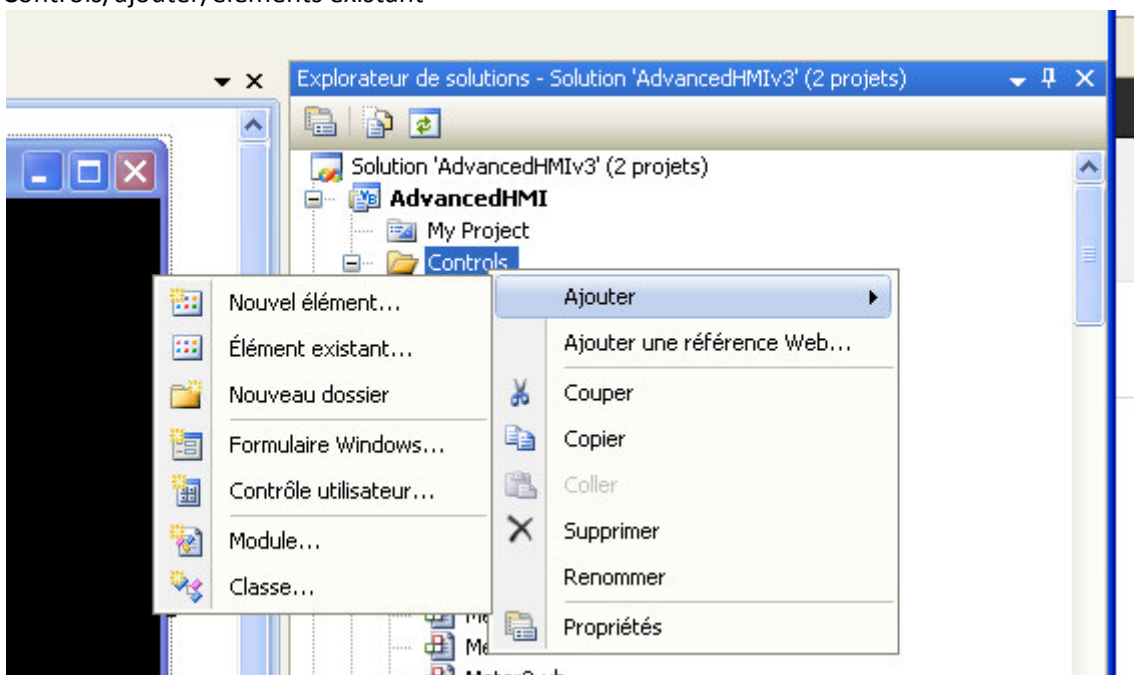
Faire un copier coller d'un élément existant (Momentary Button) dans « controls » de advancedhmi :



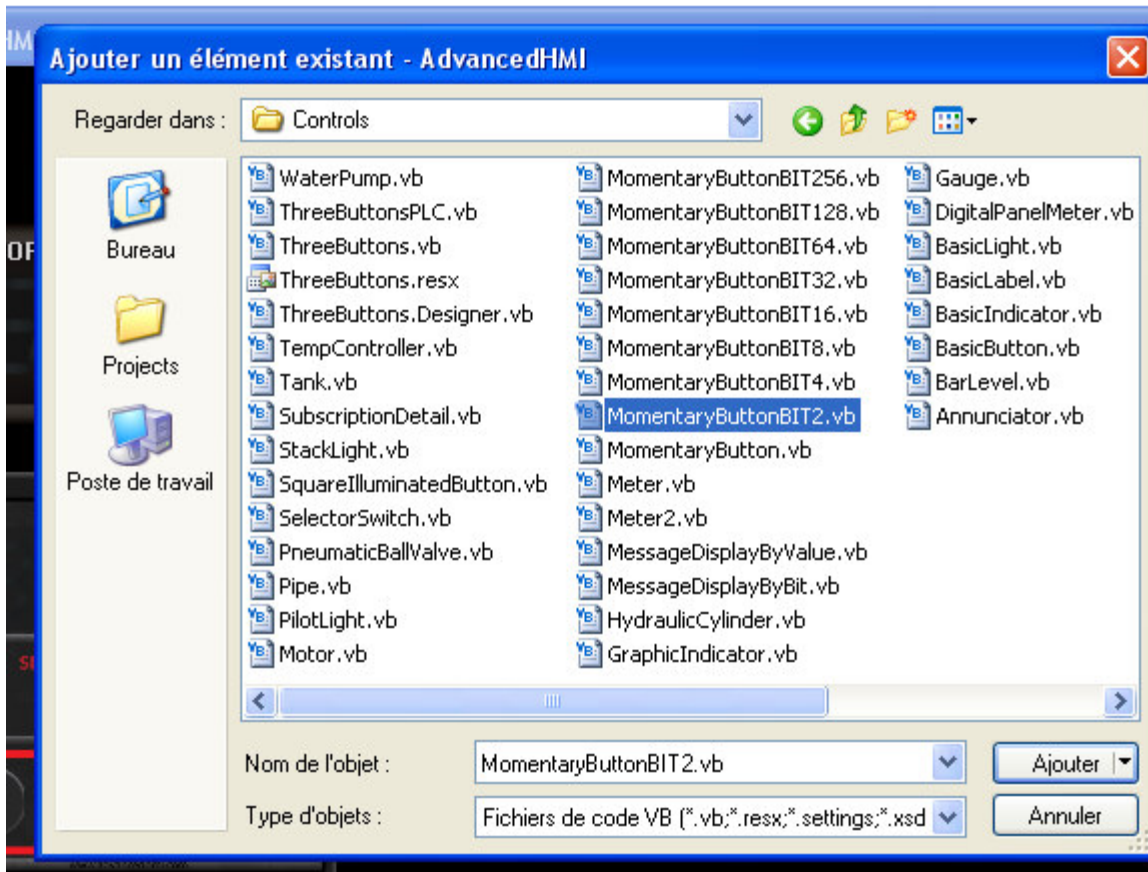
Lancer Visual basic express 2008 :




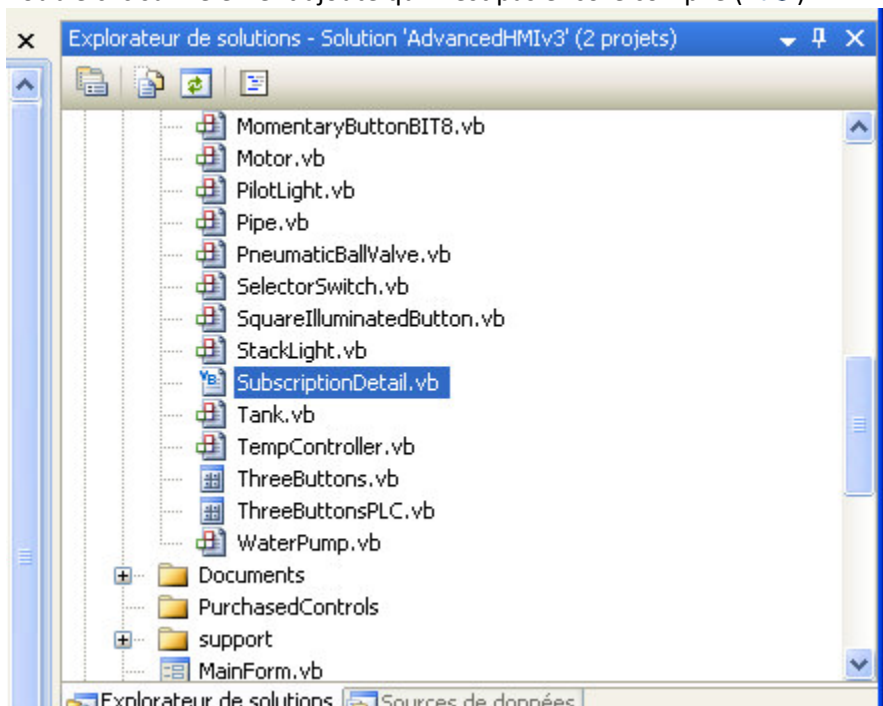
Controls/ajouter/éléments existant

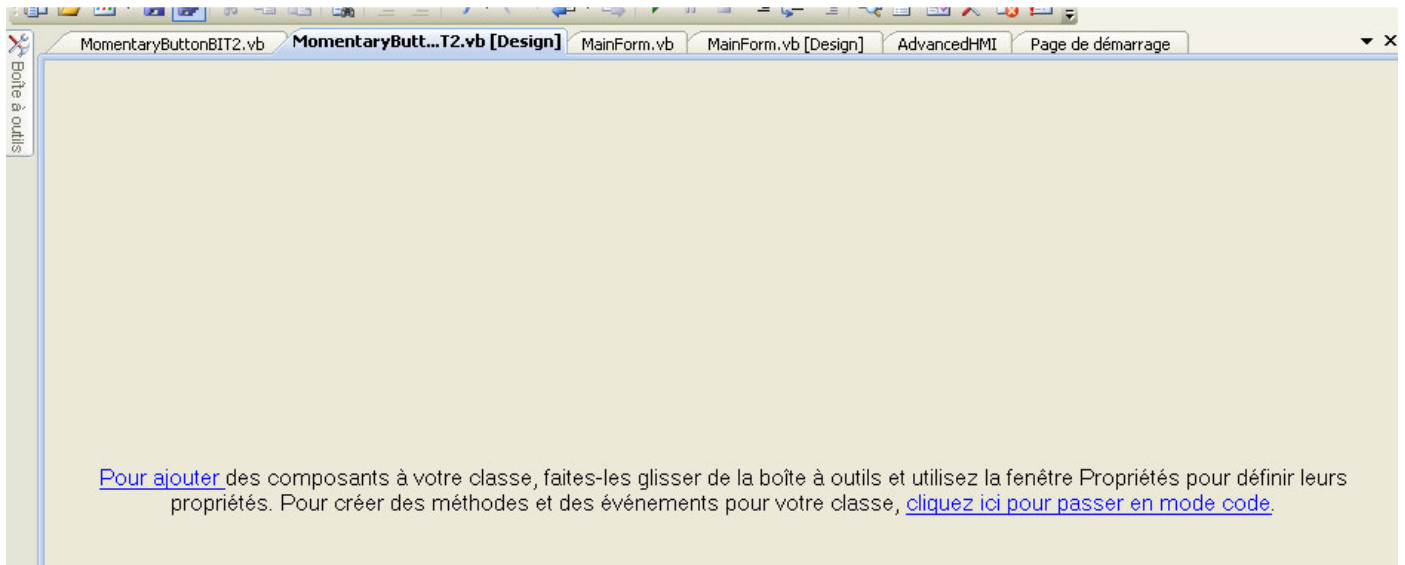


Sélectionner l'élément en vb que vous avez ajouté à Controls :

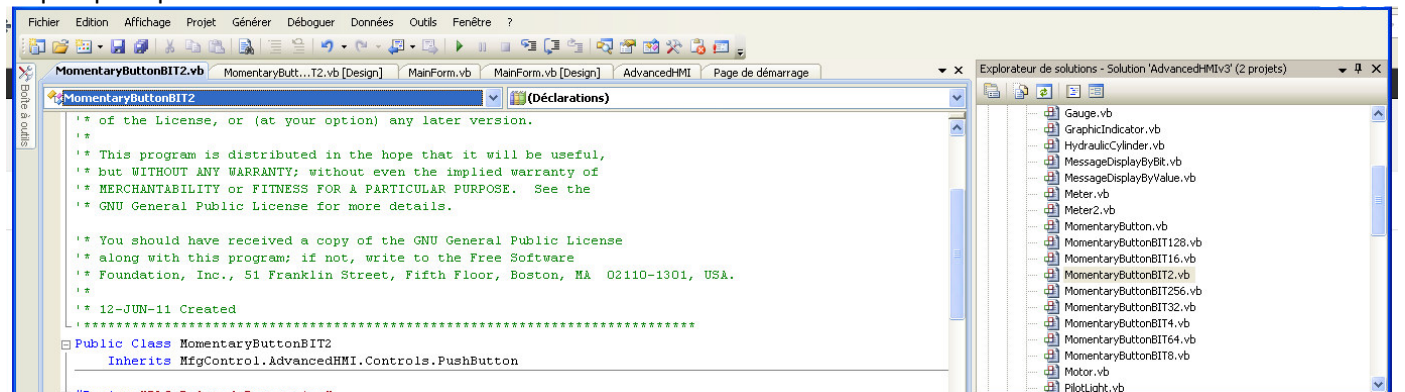


Double clic sur l'élément ajouté qui n'est pas encore compilé ()





Cliquer pour passer en mode code :



Changer Public Class pour qu'elle corresponde au nom donné à l'objet, ici, MomentaryButtonBIT2
Grâce à cette modif, le bouton enverra la valeur 2

```
#Region "PLC Related Properties"
...
Private Sub MomentaryButton_MouseDown(ByVal sender As Object, ByVal e As System.Windows.Forms.MouseEvent
    If m_PLAddressClick <> "" And Enabled Then
        Try
            Select Case MyBase.OutputType
                Case OutputTypes.MomentarySet : _CommComponent.WriteData(m_PLAddressClick, 2)
                Case OutputTypes.MomentaryReset : _CommComponent.WriteData(m_PLAddressClick, 0)
                Case OutputTypes.SetTrue : _CommComponent.WriteData(m_PLAddressClick, 2)
                Case OutputTypes.SetFalse : _CommComponent.WriteData(m_PLAddressClick, 0)
                Case OutputTypes.Toggle
                    Dim CurrentValue As Boolean
                    CurrentValue = _CommComponent.ReadAny(m_PLAddressClick)
                    If CurrentValue Then
                        _CommComponent.WriteData(m_PLAddressClick, 0)
                    Else
                        _CommComponent.WriteData(m_PLAddressClick, 2)
                    End If
                End Select
            Catch ex As MfgControl.AdvancedHMI.Drivers.common.PLCDriverException
                If ex.ErrorCode = 1808 Then
                    DisplayError(""" & m_PLAddressClick & "" PLC Address not found")
                Else
                    DisplayError(ex.Message)
                End If
            End Try
        End Try
    End Try
```

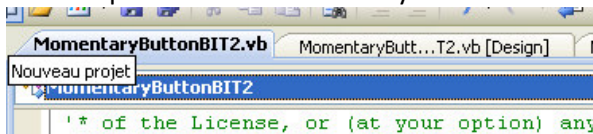
```

'*****
'* Event - Mouse Up
'*****
Private Sub MomentaryButton_MouseUp(ByVal sender As Object, ByVal e As System.Windows.Forms.MouseEventArgs)
    If m_PLAddressClick <> "" And Enabled Then
        Try
            Select Case MyBase.OutputType
                Case OutputTypes.MomentarySet : _CommComponent.WriteData(m_PLAddressClick, 0)
                Case OutputTypes.MomentaryReset : _CommComponent.WriteData(m_PLAddressClick, 2)
            End Select
        Catch ex As MfgControl.AdvancedHMI.Drivers.common.PLCDriverException
            If ex.ErrorCode = 1808 Then
                DisplayError("***** & m_PLAddressClick & ***** PLC Address not found")
            Else
                DisplayError(ex.Message)
            End If
        End Try
    End If
End Sub

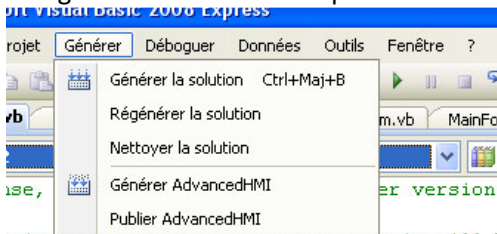
```

Enregistrer.

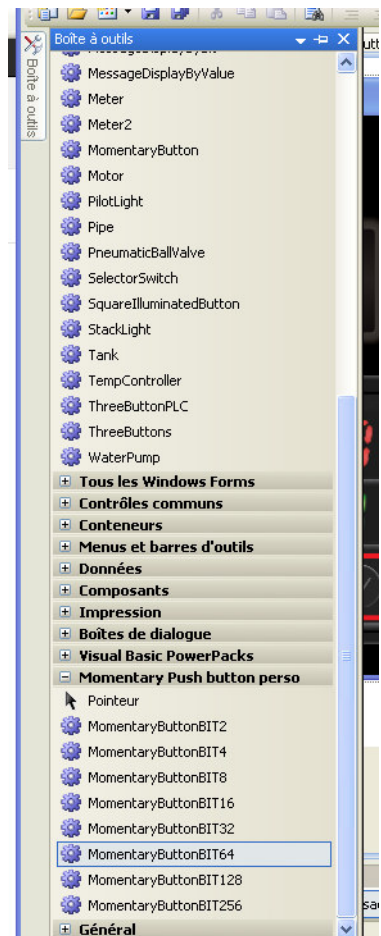
L'astérisque à côté de MomentaryButtonBIT2.vb disparaît.



Puis générer advanced hmi pour effectuer la compilation :



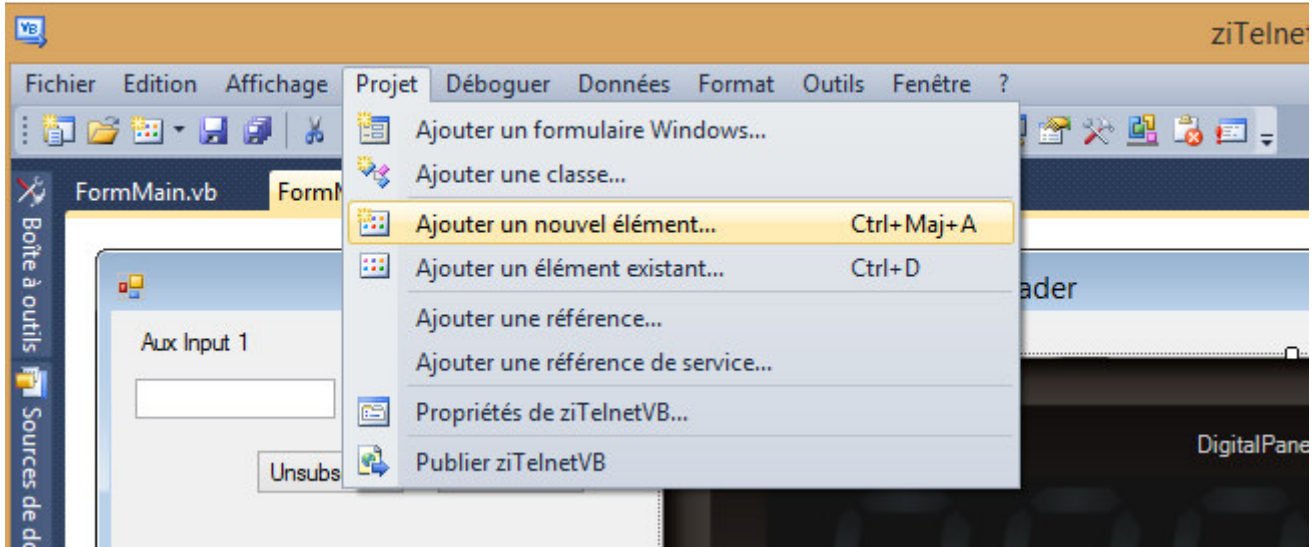
Ajouter un nouvel onglet pour y déposer vos créations par exemple :



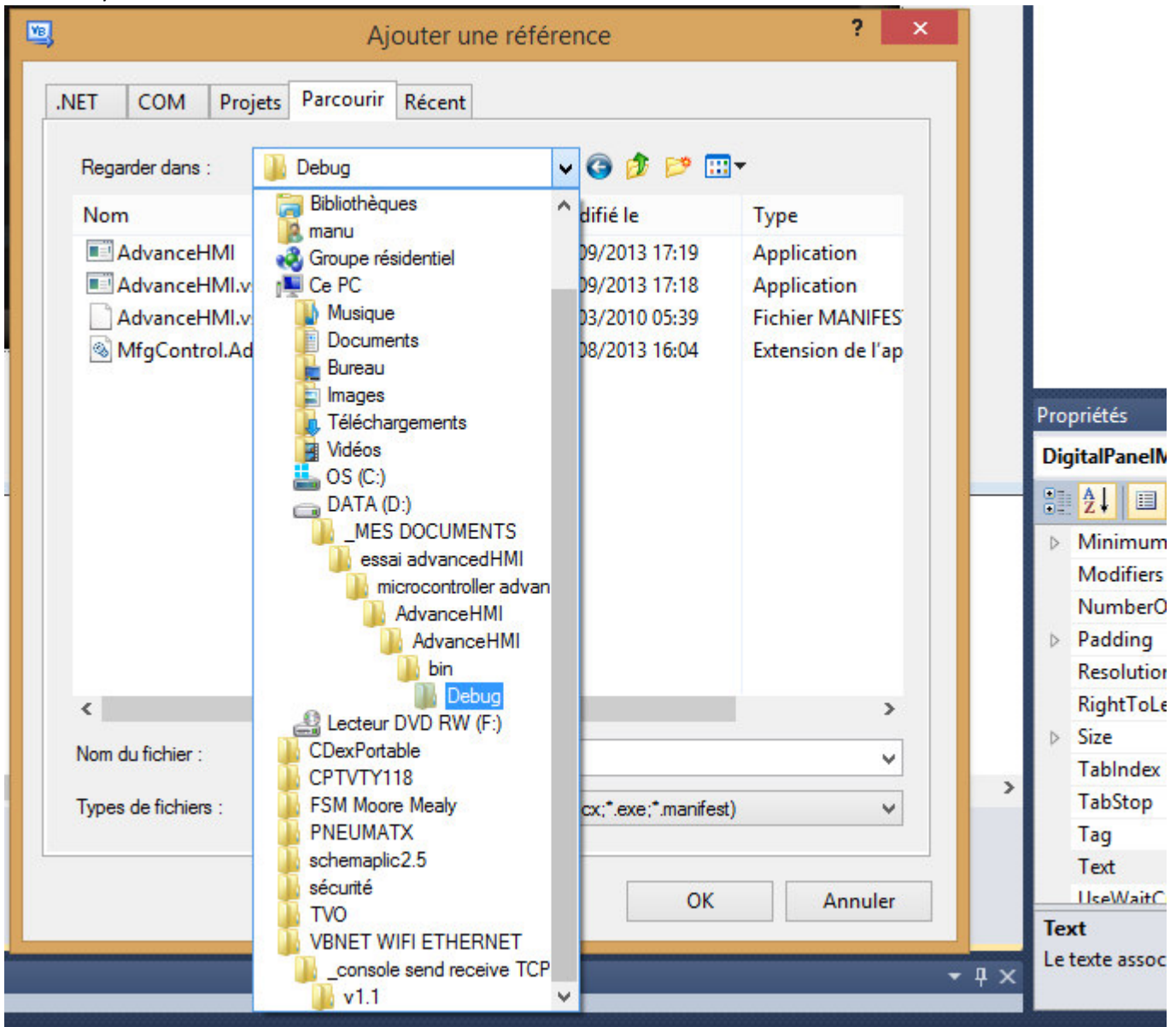
Ajouter les composants de advancedHMI à Visual basic express 2010

Ouvrir vb express 2010

Projet/ajouter une référence



Parcourir/ chercher la dll MfgControl.AdvancedHMI.Controls.dll dans le chemin suivant

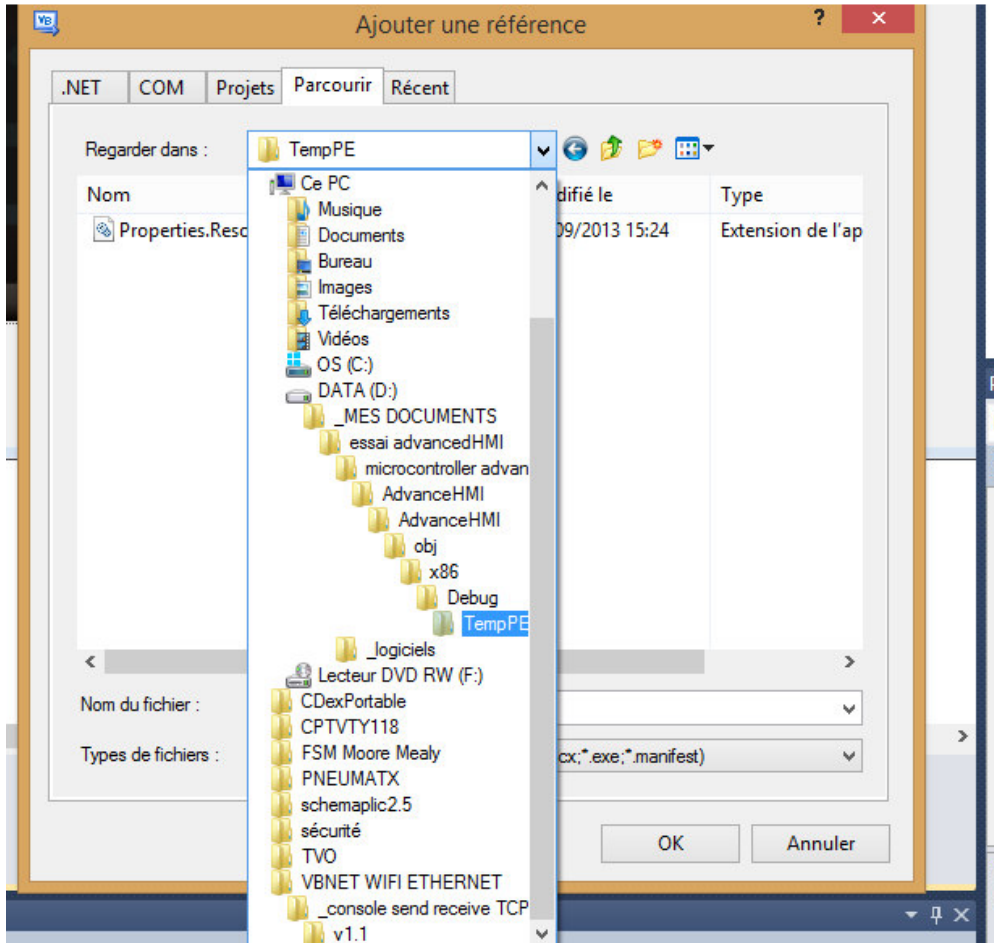


OK



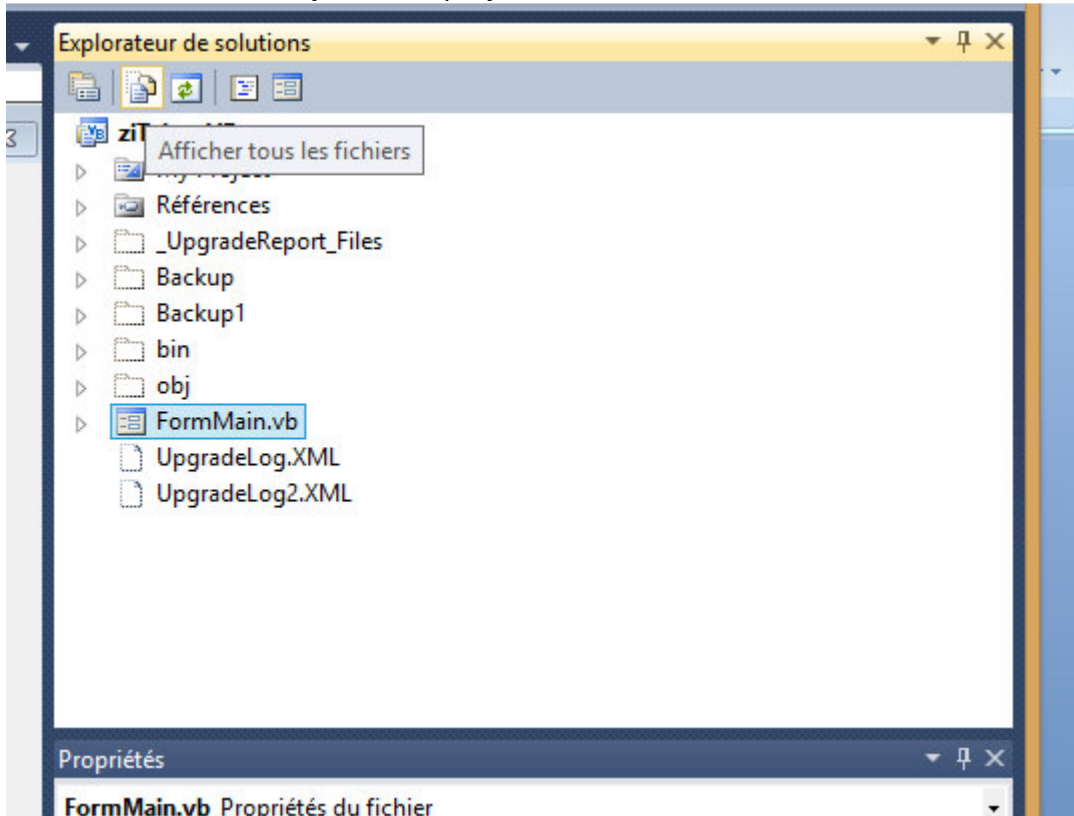
Properties.Resources.Designer.cs.dll

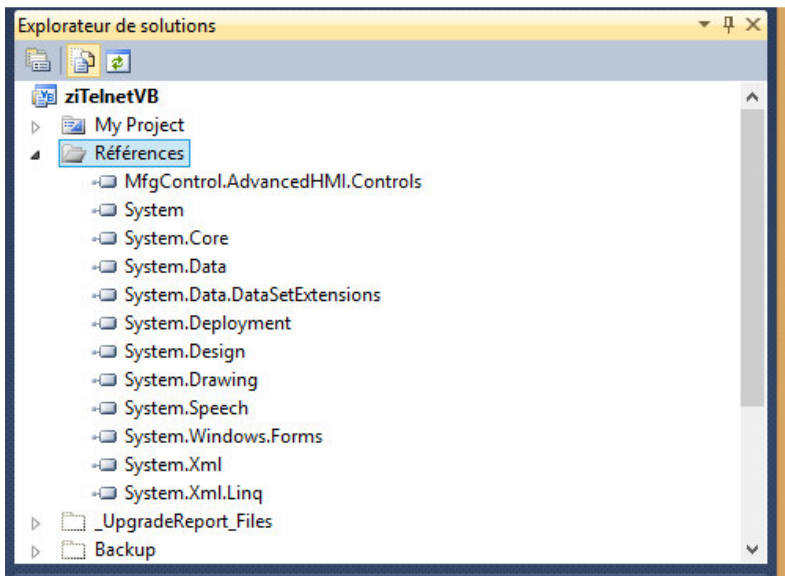
Faire la même chose avec l'autre dll



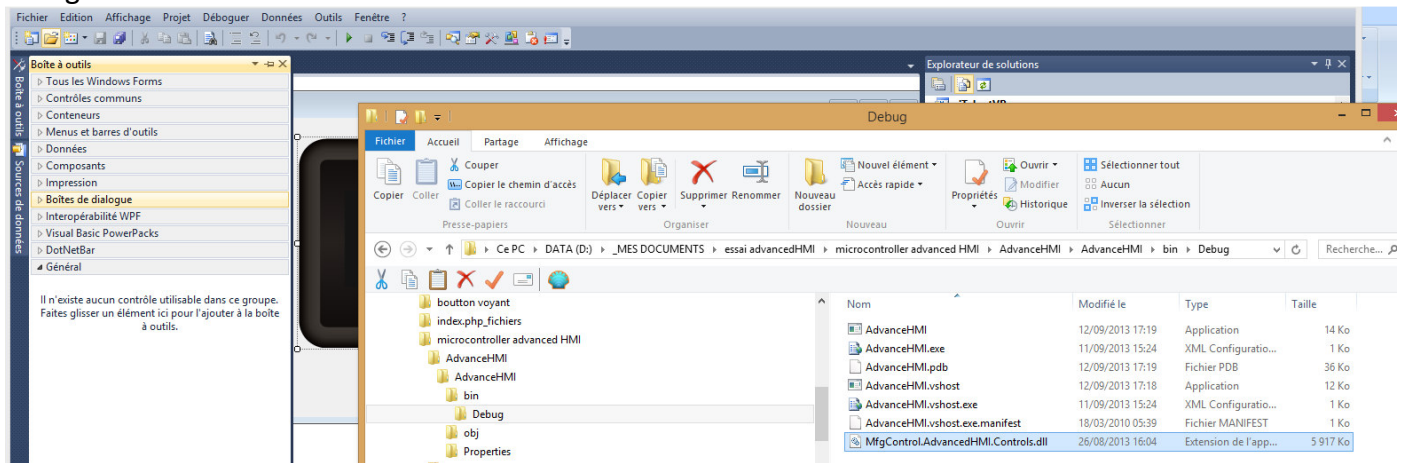
OK

Visualiser la référence ajoutée au projet :





Faire glisser une copie de la dll MfgControl.AdvancedHMI.Controls.dll dans la boîte à outil/Boîtes de dialogue



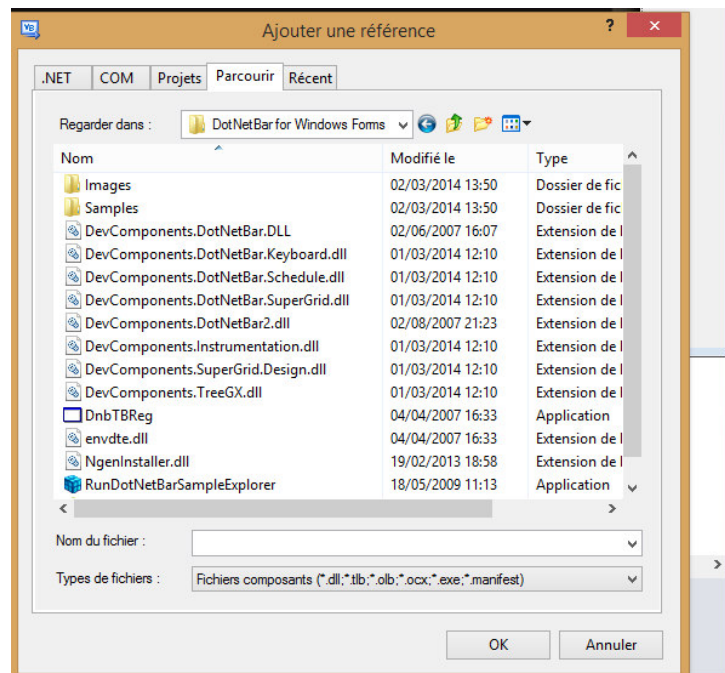
OK

Autre jauge DotNetBar :

Même méthode.



Installer la version d'essai de DotNetBarSetupTrial.msi .
 Projeter/ajouter une référence :
 Prendre les dll DevComponents uniquement



Vérifier les références ajoutées au projet.



Faire glisser la dll DevComponents.DotNetBar2.dll dans Boîtes à outils/Boîtes de dialogue.

Penser à rajouter les références à chaque nouveau projet pour les DotNetBar.

Digital panel : à 10-2 près



Propriétés	
DigitalPanelMeterA1 MfgControl.AdvancedHMI.DigitalPanelMete	
(ApplicationSettings)	
(DataBindings)	
(Name)	DigitalPanelMeterA1
AccessibleDescription	
AccessibleName	
AccessibleRole	Default
AllowDrop	True
Anchor	Top, Left
BackColor	Black
BackgroundImage	(aucun)
BackgroundImageLayout	Tile
CausesValidation	True
CommComponent	ModbusTcpCom1
ContextMenuStrip	(aucun)
Cursor	Default
DecimalPosition	2
Dock	None
Enabled	True
Font	Microsoft Sans Serif; 8,25pt; style=E
ForeColor	LightGray
GenerateMember	True
ImeMode	NoControl
KeypadFontColor	WhiteSmoke
KeypadMaxValue	65535

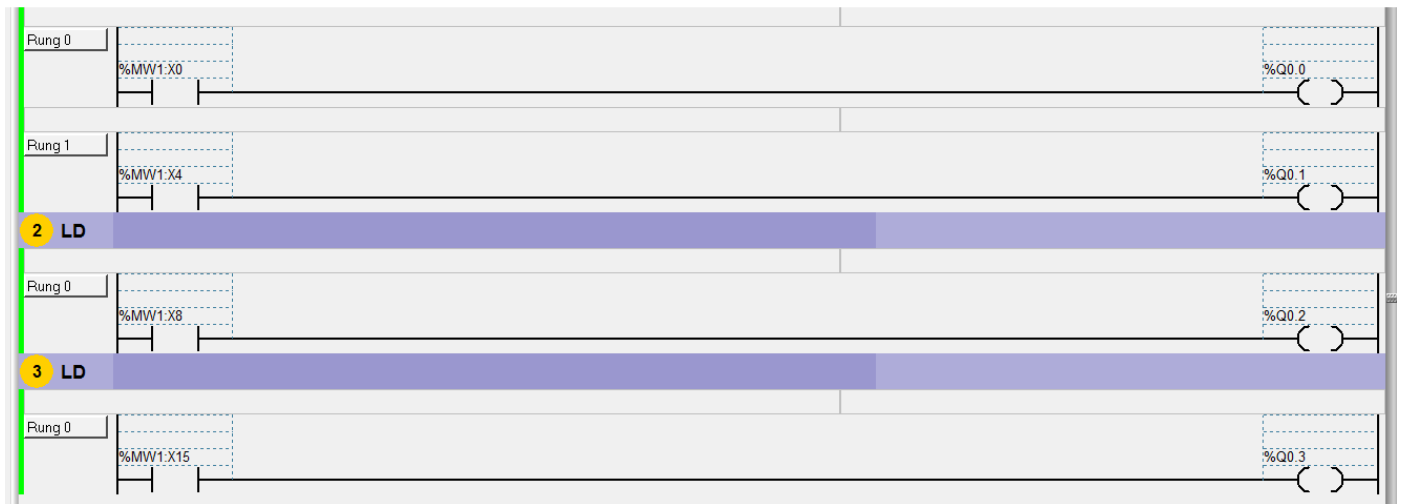
KeypadMaxValue	65535
KeypadMinValue	-400
KeypadScaleFactor	0,01
KeypadText	
KeypadWidth	300
Location	542; 307
Locked	False
Margin	3; 3; 3; 3
MaximumSize	0; 0
MinimumSize	0; 0
Modifiers	Friend
NumberOfDigits	5
Padding	0; 0; 0; 0
PLCAddressKeypad	40002
PLCAddressText	
PLCAddressValue	40002
PLCAddressVisible	
Resolution	0,001
RightToLeft	No
Size	247; 107
TabIndex	56
TabStop	True
Tag	
Text	DigitalPanelMeterA1
UseWaitCursor	False
Value	0
ValueScaleFactor	1
Visible	True

Adresse Modbus rtu advancedHMI/twido :

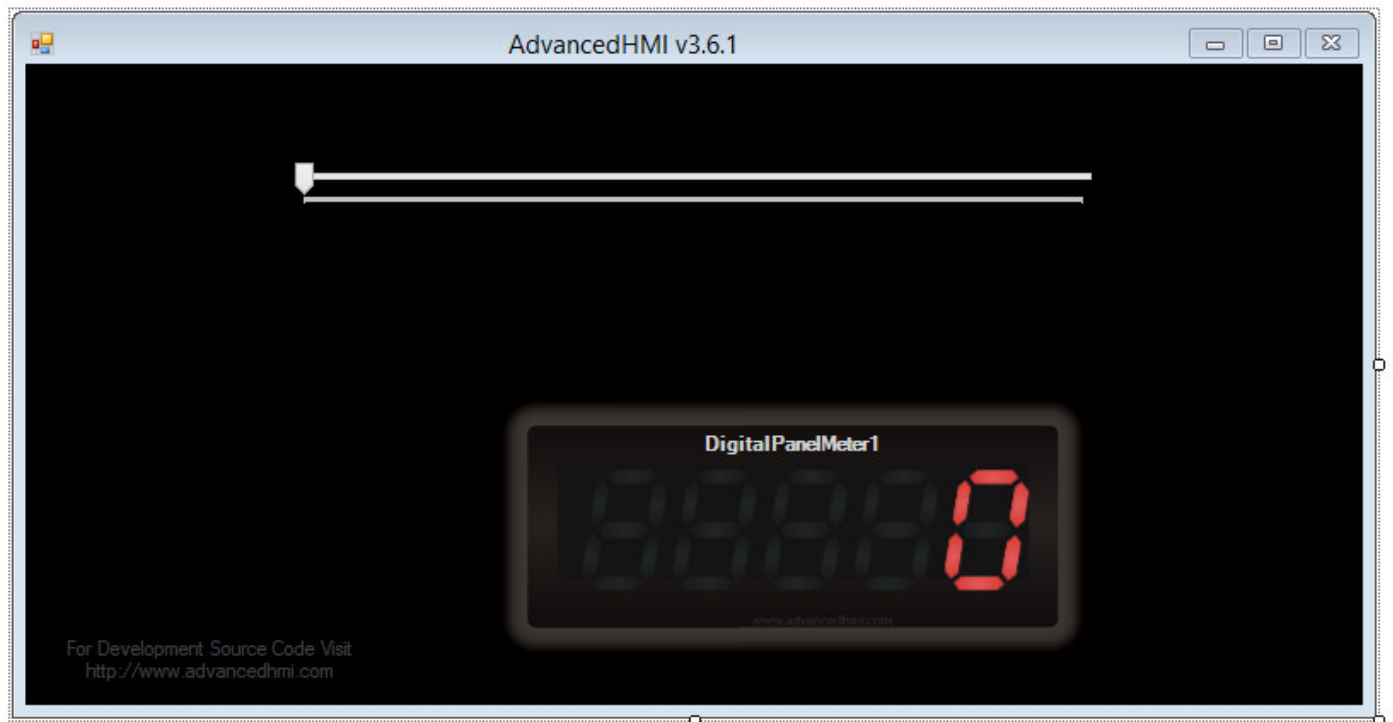
Enabled	True
Font	Microsoft Sans Serif; 8,25pt; style=B
ForeColor	ActiveCaptionText
GenerateMember	True
ImeMode	NoControl
LegendPlate	Large
Location	284; 124
Locked	False
Margin	3; 3; 3; 3
MaximumSize	0; 0
MinimumSize	0; 0
Modifiers	Friend
OutputType	MomentarySet
Padding	0; 0; 0; 0
PLCAddressClick	40002
PLCAddressVisible	
RightToLeft	No
Size	196; 287
TabIndex	49
TabStop	True
Tag	
Text	MomentaryButton1
UseWaitCursor	False
Visible	True

L'adresse 40002 correspond à l'adresse

Twido %MW1




Utiliser la trackbar pour piloter une valeur analogique :



Paramètres trackbar :

Propriétés

TrackBar1 System.Windows.Forms.TrackBar

System.Windows.Forms.TrackBar	
▶ (ApplicationSettings)	
▶ (DataBindings)	
(Name)	TrackBar1
AccessibleDescription	
AccessibleName	
AccessibleRole	Default
AllowDrop	False
Anchor	Top, Left
AutoSize	True
BackColor	 Black
CausesValidation	True
ContextMenuStrip	(aucun)
Cursor	Default
Dock	None
Enabled	True
GenerateMember	True
LargeChange	5
▶ Location	150; 56
Locked	False
▶ Margin	3; 3; 3; 3
Maximum	4096
▶ MaximumSize	0; 0
Minimum	0
▶ MinimumSize	0; 0
Modifiers	Friend
Orientation	Horizontal
RightToLeft	No
RightToLeftLayout	False
▶ Size	483; 45
SmallChange	1
SmallChange	1
TabIndex	5
TabStop	True
Tag	
TickFrequency	1
TickStyle	BottomRight
UseWaitCursor	False
Value	0
Visible	True

Paramètre digitalpanelmeter :

Propriétés	
DigitalPanelMeter1 MfgControl.AdvancedHMI.DigitalPanelMeter	
▷ (ApplicationSettings)	
▷ (DataBindings)	
(Name)	DigitalPanelMeter1
AccessibleDescription	
AccessibleName	
AccessibleRole	Default
AllowDrop	False
Anchor	Top, Left
BackColor	Black
BackgroundImage	(aucun)
BackgroundImageLayout	Tile
CausesValidation	True
CommComponent	ModbusTcpCom1
ContextMenuStrip	(aucun)
Cursor	Default
DecimalPosition	0
Dock	None
Enabled	True
▷ Font	Microsoft Sans Serif; 8,25pt; style=Bold
ForeColor	LightGray
GenerateMember	True
ImeMode	NoControl
KeypadFontColor	WhiteSmoke
KeypadMaxValue	65535
KeypadMinValue	0
KeypadScaleFactor	1
KeypadText	
KeypadWidth	300
▷ Location	279; 197
Locked	False

▷ Margin	3; 3; 3; 3
▷ MaximumSize	0; 0
▷ MinimumSize	0; 0
Modifiers	Friend
NumberOfDigits	5
▷ Padding	0; 0; 0; 0
PLCAddressKeypad	4002
PLCAddressText	
PLCAddressValue	4002
PLCAddressVisible	
Resolution	1
RightToLeft	No
▷ Size	341; 148
TabIndex	4
TabStop	True
Tag	
Text	DigitalPanelMeter1
UseWaitCursor	False
Value	0
ValueScaleFactor	1
Visible	True

Valider l'option keypad

Programme sur la main form :

```

mainform (Declarations)
Public Class MainForm
    Dim valeur As Integer
    Dim result As String

    '*****
    '* Stop polling when the form is not visible in order to reduce communications
    '* Copy this section of code to every new form created
    '*****
    Private Sub Form_VisibleChanged(ByVal sender As Object, ByVal e As System.EventArgs) Handles Me.VisibleChanged
        If components IsNot Nothing Then
            Dim drv As AdvancedHMIDrivers.IComComponent
            '*****
            '* Search for comm components
            '*****
            For i As Integer = 0 To components.Components.Count - 1
                If components.Components(i).GetType.GetInterface("AdvancedHMIDrivers.IComComponent") IsNot Nothing Then
                    drv = components.Components.Item(i)
                    '* Stop/Start polling based on form visibility
                    drv.DisableSubscriptions = Not Me.Visible
                End If
            Next
        End If
    End Sub

    '*****
    '* This will guarantee that even hidden forms are all closed
    '* when the main application is closed
    '*****
    Private Sub MainForm_FormClosed(ByVal sender As Object, ByVal e As System.Windows.Forms.FormClosedEventArgs) Handles Me.FormClosed
        Environment.Exit(0)
    End Sub

    '*****
    '* Filling the form with a gradient
    '*****
    Private Sub MainForm_Paint(sender As Object, e As System.Windows.Forms.PaintEventArgs) Handles Me.Paint
        Dim rect As New System.Drawing.Rectangle(0, 0, e.ClipRectangle.Width, e.ClipRectangle.Height)
        Dim gradientBrush As New System.Drawing.Drawing2D.LinearGradientBrush(New Point(0, 0), New Point(0, Height),
            System.Drawing.Color.FromArgb(180, 100, 200), System.Drawing.Color.FromArgb(110, 200, 255))
        e.Graphics.FillRectangle(gradientBrush, rect)
    End Sub
End Class

```

```
        System.Drawing.Color.FromArgb(180, 100, 200), System.Drawing.Color.FromArgb(110, 200, 255))
        'e.Graphics.FillRectangle(gradientBrush, rect)
    End Sub

    Private Sub TrackBar1_Scroll(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles TrackBar1.Scroll
        valeur = TrackBar1.Value
        result = valeur.ToString
        DigitalPanelMeter1.PLCAddressKeypad = result
        DigitalPanelMeter1.CommComponent.Write(40002, valeur)
    End Sub

    Private Sub DigitalPanelMeter1_Click(ByVal sender As System.Object, ByVal e As System.EventArgs) Handles DigitalPanelMeter1.Click
    End Sub
End Class
```

On utilise l'adresse du keypad interposée pour afficher la valeur de la trackbar en 40002 et commcomponent pour envoyer la valeur de la trackbar.