

BALStartup.frm

```
Private Sub Form_Load()  
    ' Search through attached HID devices for the "Buttons & Lights" hardware.  
    ,  
    If OpenUSBdevice("Buttons & Lights") Then  
        DisplayWindow.Show (1) ' Pass control to the DisplayWindow form  
        StatusBox.Text = vbCrLf & "Hope you had fun!" ' Change the text for the return from DisplayWindow  
    End If  
    ' StartupWindow will be displayed now  
End Sub  
Private Sub OKButton_Click()  
    Stop ' Exit the program  
End Sub
```

ButtonsLights.frm

```
' Declare some variables that will make the program easier to read  
Dim isON, isOFF, Red, Black As Long  
  
Private Sub Form_Load()  
    ' Initialize the module's variables  
    isON = 3720: isOFF = 3960: Red = RGB(255, 0, 0): Black = RGB(0, 0, 0)  
    ' Put SoftButtons in their default position  
    For i% = 0 To 7: SoftButton(i%).Top = isOFF: Next i% ' All Soft Buttons Off  
    SoftButton(1).Top = isON: SoftButton(4).Top = isON ' Pattern used on Front Cover!  
    SelectFunction.ListIndex = 0 ' Select "A only"  
    RealLEDValue.Visible = False ' Turn off debug window  
End Sub  
  
Sub SoftButton_Click(index%)  
    ' Toggle the SoftButton on a click  
    If SoftButton(index%).Top = isON Then  
        SoftButton(index%).Top = isOFF  
    Else: SoftButton(index%).Top = isON  
    End If  
End Sub  
  
Private Sub Timer1_Timer()  
    ' Check for button changes every 200msec  
    ' NOTE: only flip the "RealButtons" and "LED(i%)" if necessary, otherwise there is flicker  
    Dim RealButtons As Byte: Dim RealLEDS As Byte: Dim LEDon As Boolean  
    ' What is the value of the Real Buttons  
    Call ReadUSBdevice(AddressFor(RealButtons), 1)  
    For i% = 0 To 7  
        If ((RealButtons And 1) = 1) And (RealButton(i%).Top = isOFF) Then RealButton(i%).Top = isON  
        If ((RealButtons And 1) = 0) And (RealButton(i%).Top = isON) Then RealButton(i%).Top = isOFF  
        RealButtons = ((RealButtons And &HFE) / 2) ' Clear Bit 0 before divide  
    Next i%  
    ' Now update the LEDs, first the Display LEDs then the Real LEDs  
    RealLEDS = 0  
    For i% = 0 To 7  
        LEDon = False ' Let's assume  
        RealLEDS = RealLEDS * 2  
        Select Case SelectFunction.ListIndex  
            Case 0: If SoftButton(i%).Top = isON Then LEDon = True ' A only  
            Case 1: If ((SoftButton(i%).Top = isON) Or (RealButton(i%).Top = isON)) Then LEDon = True ' A OR B  
            Case 2: If ((SoftButton(i%).Top = isON) And (RealButton(i%).Top = isON)) Then LEDon = True ' A AND B  
            Case 3: If ((SoftButton(i%).Top = isON) Xor (RealButton(i%).Top = isON)) Then LEDon = True ' A XOR B  
            Case 4: If RealButton(i%).Top = isON Then LEDon = True ' B only  
        End Select  
        If LEDon Then ' Turn it on IFF it's not already on  
            If LED1(i%).FillColor = Black Then LED1(i%).FillColor = Red  
            RealLEDS = RealLEDS + 1  
        Else: If LED1(i%).FillColor = Red Then LED1(i%).FillColor = Black  
        End If  
    Next i%  
    Call WriteUSBdevice(AddressFor(RealLEDS), 1)  
End Sub
```