

Option Explicit

Type WavHead

```
Sign As String * 4 '  
FileSize As Long '  
DataTypNm As String * 4 '  
ChunkNm1 As String * 4 '  
ChunkSiz1 As Long '  
DataFmt As Integer '  
NoChannels As Integer '  
SampRat As Long '  
ByteRat As Long '  
BytesPerSample As Integer '  
BitsPerChannel As Integer '
```

End Type

```
Public NoSamp As Long, WavH As WavHead, Wav() As Byte, Nm As Long, L As Long
```

```
.....  
''' Load Wave File .....  
.....
```

```
Public Sub ReadWave(FileName As String)
```

```
Dim R As Single, S As String * 4, I As Long, J As Long
```

```
Dim A() As Byte, B() As Integer 'LL As Long
```

```
Open FileName For Binary As #1: Get #1, , WavH
```

```
If WavH.DataFmt = 1 Then
```

```
Get #1, , S: Get #1, , L: ' LL = 47: Form1.Print L, S
```

```
If WavH.NoChannels = 1 Then
```

```
If WavH.BitsPerChannel = 8 Then
```

```
NoSamp = L: Nm = NoSamp - 1: ReDim A(Nm), Wav(Nm): Get #1, , A
```

```
For I = 0 To Nm: Wav(I) = A(I): Next I
```

```
Erase A
```

```
ElseIf WavH.BitsPerChannel = 16 Then
```

```
NoSamp = L \ 2: Nm = NoSamp - 1
```

```
R = 128 / 32767: ReDim B(Nm), Wav(Nm): Get #1, , B
```

```
For I = 0 To Nm: J = CInt(B(I) * R) + 128
```

```
If J > 255 Then J = 255 Else If J < 0 Then J = 0
```

```
Wav(I) = J
```

```
Next I
```

```
Erase B
```

```
End If
```

```
ElseIf WavH.NoChannels = 2 Then
```

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```

**** Load Wave File ****
*****

```

```
Public Sub ReadWave(FileName As String)
```

```
Dim R As Single, S As String * 4, I As Long, J As Long
```

```
Dim A() As Byte, B() As Integer 'LL As Long
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```
Open FileName For Binary As #1: Get #1, , WavH
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```
If WavH.DataFmt = 1 Then
```

```
Get #1, , S: Get #1, , L: ' LL = 47: Form1.Print L, S
```

```
If WavH.NoChannels = 1 Then
```

```
    If WavH.BitsPerChannel = 8 Then
```

```
        NoSamp = L: Nm = NoSamp - 1: ReDim A(Nm), Wav(Nm): Get #1, , A
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```
            If J > 255 Then J = 255 Else If J < 0 Then J = 0
```

```
            Wav(I) = J
```

```
        Next I
```

```
        Erase B
```

```
    End If
```

```
ElseIf WavH.NoChannels = 2 Then
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```
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```
        NoSamp = L \ 2: Nm = NoSamp - 1: ReDim A(L - 1), Wav(Nm): Get #1, , A
```

```
        For I = 0 To Nm: Wav(I) = A(2 * I):: Next I
```

```
        Erase A
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```
    ElseIf WavH.BitsPerChannel = 16 Then
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```
        NoSamp = L \ 4: Nm = NoSamp - 1: R = 128 / 32767
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```
        ReDim B(L \ 2 - 1), Wav(Nm): Get #1, , B
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```
        For I = 0 To Nm: J = CInt(B(2 * I) * R) + 128
```

```
            If J > 255 Then J = 255 Else If J < 0 Then J = 0
```

```
            Wav(I) = J
```

```
        Next I
```

```
        Erase B
```

```
    End If
```

```
End If
```

```
End If
```

```
Close #1
```

```
End Sub
```



```
Private Sub Command2_Click()
```

```
Dim I As Long
```

```
With CommonDialog1
```

```
.DialogTitle = "Load Wave File"
```

```
.Filter = "Wave File (*.wav)|*.wav|All Files (*.*)|*.*|"
```

```
.FilterIndex = 1: .FileName = "": .ShowOpen
```

```
End With
```

```
If CommonDialog1.FileName <> "" Then
```

```
ReadWave (CommonDialog1.FileName)
```

```
End If
```

```
Text1.Text = WavH.NoChannels
```

```
Text2.Text = WavH.SampRat
```

```
Text3.Text = WavH.BitsPerChannel
```

```
Text4.Text = WavH.DataFmt
```

```
Picture1.Picture = LoadPicture("")
```

```
Picture1.ScaleWidth = Nm: Picture1.ScaleHeight = 290
```

```
Picture1.PSet (0, 256 - Wav(0)), RGB(30, 230, 200)
```

```
For I = 1 To Nm
```

```
Picture1.Line -(I, 255 - Wav(I)), RGB(200, 120, 230):
```

```
Next I
```

```
End Sub
```

```
Private Sub Command3_Click()
```

```
With CommonDialog1
```

```
.ShowSave
```

```
.Filter = "wave file (*.wav)|*.wav|All Files (*.*)|*.*|"
```

```
.DialogTitle = "Save Audio File"
```

```
End With
```

```
SaveFile (CommonDialog1.FileName)
```

```
End Sub
```

```
Private Sub Form_Load()
```

```
Form1.Caption = "Wave Files"
```

```
End Sub
```