

LAMPIRAN A
KODE PROGRAM

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Private Sub CmdResFreq_Click()
Dim Qts, Qes, Fs, Vas, PEmax, VolBox As Double
Dim Qtc, No, NodB, SoundPresLev, PEmaxdB, PeakSPL, Fr, dBmag,
RMSSPL, RMSSPLg, Y As Double
Dim VolBoxdes, Fbdes, F3des, VolBoxop, Fbop, F3op As Double
Dim txtVolBoxdes, txtFbdes, txtF3des, txtVolBoxop, txtFbop,
txtF3op As Double
Dim tempX As Double
Dim intV, intW, intX, intY, intZ As Integer
Dim intF As Integer
Dim intI As Integer

    If Trim(Me.Qts.Text) <= 0 Then
        MsgBox "Qts tidak boleh diisi 0!", vbCritical, "ERROR
INPUT"
        Me.Qts.SetFocus
        Exit Sub
    End If
    If Trim(Me.Qes.Text) = 0 Then
        MsgBox "Qts tidak boleh diisi 0!", vbCritical, "ERROR
INPUT"
        Me.Qes.SetFocus
        Exit Sub
    End If
    If Trim(Me.Fs.Text) = 0 Then
        MsgBox "Qts tidak boleh diisi 0!", vbCritical, "ERROR
INPUT"
        Me.Fs.SetFocus
        Exit Sub
    End If
    If Trim(Me.Vas.Text) = 0 Then
        MsgBox "Qts tidak boleh diisi 0!", vbCritical, "ERROR
INPUT"
        Me.Vas.SetFocus
        Exit Sub
    End If
    If Trim(Me.PEmax.Text) = 0 Then
        MsgBox "Qts tidak boleh diisi 0!", vbCritical, "ERROR
INPUT"
        Me.PEmax.SetFocus
        Exit Sub
    End If
    If Trim(Me.VolBox.Text) = 0 Then
        MsgBox "Vb tidak boleh diisi 0!", vbCritical, "ERROR
INPUT"
        Me.VolBox.SetFocus
        Exit Sub
    End If

    frmGraph.Show

    With frmGraph
        .Picture1.ForeColor = &H808080
        .Picture1.DrawWidth = 1
        For intX = 200 To 4700 Step 300
            .Picture1.Line (0, intX)-(8300, intX)
        Next intX
    End With

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        .Picture1.ForeColor = &HFF8080
        .Picture1.DrawWidth = 1
        intZ = 0
        For intX = 0 To 3
            For intY = 20 To 100 Step 10
                intI = (((Log(intY) / 2.302585) - (Log(10) /
2.303585)) * 4000) + intZ
                .Picture1.Line (intI, 0)-(intI, 5000)
            Next intY
            intZ = intI
        Next intX
    End With

Merek = Me.Merek.Text
Tipe = Me.Tipe.Text
Qts = Me.Qts.Text
Qes = Me.Qes.Text
Fs = Me.Fs.Text
Vas = Me.Vas.Text
PEmax = Me.PEmax.Text
VolBox = Me.VolBox.Text

No = 9.64 * (10 ^ -10) * (Fs ^ 3) * (Vas / Qes)
NodB = (10 * Log(No)) / 2.302585
SoundPresLev = 112 + NodB
PEmaxdB = (10 * Log(PEmax)) / 2.302585
PeakSPL = SoundPresLev + PEmaxdB

Qtc = Qts * (((Vas / VolBox) + 1) ^ 0.5)
VolBoxdes = Me.VolBox.Text
Fbdes = (Qtc / Qts) * Fs
F3des = Fbdes * ((1 / Qtc ^ 2 - 2 + ((1 / Qtc ^ 2 - 2) ^ 2 +
4) ^ 0.5) / 2) ^ 0.5

VolBoxop = Vas / (((1 / Qts) / (1 / 0.707)) ^ 2 - 1)
Fbop = (0.707 / Qts) * Fs
F3op = Fbop * (((1 / (0.707 ^ 2)) - 2) + (((1 / (0.707 ^ 2))
- 2) ^ 2 + 4) ^ 0.5) / 2) ^ 0.5

With frmGraph
    .txtQtcdes.Text = Qtc
    .txtVolBoxdes.Text = VolBoxdes
    .txtFbdes.Text = Fbdes
    .txtF3des.Text = F3des
    .txtVolBoxop.Text = VolBoxop
    .txtFbop.Text = Fbop
    .txtF3op.Text = F3op
    .txtMerek.Text = Merek
    .txtTipe.Text = Tipe
    .txtQts.Text = Qts
    .txtQes.Text = Qes
    .txtFs.Text = Fs
    .txtVas.Text = Vas
    .txtPEmax.Text = PEmax
End With

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With frmGraph
    .Picture1.ForeColor = vbRed
    .Picture1.DrawWidth = 1

    For intF = 0 To 8300 Step 1
        tempX = 10 ^ ((intF / 4000) + 1)
        Fr = (tempX / Fbdes) ^ 2
        dBmag = (10 * Log((Fr ^ 2) / (((Fr - 1) ^ 2) + (Fr /
(Qtc ^ 2)))))) / 2.302585
        RMSSPL = SoundPresLev + dBmag
        RMSSPLg = (RMSSPL * 100) - 6000
        Y = 5000 - RMSSPLg
        .Picture1.PSet (intF, Y)
    Next intF

End With

With frmGraph
    .Picture1.ForeColor = vbGreen
    .Picture1.DrawWidth = 1

    For intF = 0 To 8300 Step 1
        tempX = 10 ^ ((intF / 4000) + 1)
        Fr = (tempX / Fbop) ^ 2
        dBmag = (10 * Log((Fr ^ 2) / (((Fr - 1) ^ 2) + (Fr /
(0.707 ^ 2)))))) / 2.302585
        RMSSPL = SoundPresLev + dBmag
        RMSSPLg = (RMSSPL * 100) - 6000
        Y = 5000 - RMSSPLg
        .Picture1.PSet (intF, Y)
    Next intF

End With

End Sub

Private Sub Qts_Change()
    If Len(Me.Qts.Text) >= 5 Then
        Me.Qts.Text = Left(Trim(Me.Qts.Text), 5)
        Me.Qes.SetFocus
    End If
End Sub

Private Sub Qts_KeyPress(KeyAscii As Integer)
    If Not ((KeyAscii >= Asc("0") And KeyAscii <= Asc("9")) Or _
        KeyAscii = Asc(".") Or KeyAscii = vbKeyBack Or
KeyAscii = vbKeyReturn) Then
        Beep
        KeyAscii = 0
    Else
        If KeyAscii = vbKeyReturn Then
            Me.Qes.SetFocus
        End If
    End If
End Sub

Private Sub Qes_Change()
    If Len(Me.Qes.Text) >= 5 Then

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        Me.Qes.Text = Left(Trim(Me.Qes.Text), 5)
        Me.Fs.SetFocus
    End If
End Sub

Private Sub Qes_KeyPress(KeyAscii As Integer)
    If Not ((KeyAscii >= Asc("0") And KeyAscii <= Asc("9")) Or _
        KeyAscii = Asc(".") Or KeyAscii = vbKeyBack Or _
        KeyAscii = vbKeyReturn) Then
        Beep
        KeyAscii = 0
    Else
        If KeyAscii = vbKeyReturn Then
            Me.Fs.SetFocus
        End If
    End If
End Sub

Private Sub Fs_Change()
    If Len(Me.Fs.Text) >= 5 Then
        Me.Fs.Text = Left(Trim(Me.Fs.Text), 5)
        Me.Vas.SetFocus
    End If
End Sub

Private Sub Fs_KeyPress(KeyAscii As Integer)
    If Not ((KeyAscii >= Asc("0") And KeyAscii <= Asc("9")) Or _
        KeyAscii = Asc(".") Or KeyAscii = vbKeyBack Or _
        KeyAscii = vbKeyReturn) Then
        Beep
        KeyAscii = 0
    Else
        If KeyAscii = vbKeyReturn Then
            Me.Vas.SetFocus
        End If
    End If
End Sub

Private Sub Vas_Change()
    If Len(Me.Vas.Text) >= 5 Then
        Me.Vas.Text = Left(Trim(Me.Vas.Text), 5)
        Me.PEmax.SetFocus
    End If
End Sub

Private Sub Vas_KeyPress(KeyAscii As Integer)
    If Not ((KeyAscii >= Asc("0") And KeyAscii <= Asc("9")) Or _
        KeyAscii = Asc(".") Or KeyAscii = vbKeyBack Or _
        KeyAscii = vbKeyReturn) Then
        Beep
        KeyAscii = 0
    Else
        If KeyAscii = vbKeyReturn Then
            Me.PEmax.SetFocus
        End If
    End If
End Sub

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Private Sub PEmax_Change()
    If Len(Me.PEmax.Text) >= 5 Then
        Me.PEmax.Text = Left(Trim(Me.PEmax.Text), 5)
        Me.VolBox.SetFocus
    End If
End Sub

Private Sub Pemax_KeyPress(KeyAscii As Integer)
    If Not ((KeyAscii >= Asc("0") And KeyAscii <= Asc("9")) Or _
        KeyAscii = Asc(".") Or KeyAscii = vbKeyBack Or _
        KeyAscii = vbKeyReturn) Then
        Beep
        KeyAscii = 0
    Else
        If KeyAscii = vbKeyReturn Then
            Me.VolBox.SetFocus
        End If
    End If
End Sub

Private Sub VolBox_Change()
    If Len(Me.PEmax.Text) >= 5 Then
        Me.PEmax.Text = Left(Trim(Me.PEmax.Text), 5)
        Me.CmdResFreq.SetFocus
    End If
End Sub

Private Sub VolBox_KeyPress(KeyAscii As Integer)
    If Not ((KeyAscii >= Asc("0") And KeyAscii <= Asc("9")) Or _
        KeyAscii = Asc(".") Or KeyAscii = vbKeyBack Or _
        KeyAscii = vbKeyReturn) Then
        Beep
        KeyAscii = 0
    Else
        If KeyAscii = vbKeyReturn Then
            Me.CmdResFreq.SetFocus
        End If
    End If
End Sub

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