

```
$regfile = "m16def.dat"
$crystal = 8000000
$baud = 9600

Config Porta = Output
Config Portc = Input
Config Portb = Output
Config Timer1 = Timer , Prescale = 8
Const Timerstart = 65536 - 18000
Timer1 = Timerstart
Enable Timer1
Enable Interrupts

Dim I As Integer
Dim C As Integer
Dim S As Integer
Dim Inch As Integer
Dim Cm As Integer

S = 1000

Set Portb.0
Waitus S
Reset Portb.0
On Timer1 Timer_1_int
Start:

Do
C = 0
I = 0
Cm = 0
Inch = 0

'=====40KHz frequency =====

While I < 16

Set Porta.0
Waitus 8

Reset Porta.0
Waitus 12

Incr I

Wend

Waitus 1000

'=====Receiving Input from the receiver=====

While Pinc.5 = 0

Incr C

If C > 32000 Then
C = 0

Goto Start

End If

Wend

'=====Caliberation=====

Inch = C + 207
Inch = Inch / 24
Inch = Inch + 1
```

```
Cm = Inch * 127  
Cm = Cm / 50
```

```
Waitms 10  
Print Chr(cm);  
Loop  
End
```

```
'=====Servomotor=====
```

```
Timer_1_int:  
If S < 2000 Then  
S = S + 2  
Set Portb.0  
Waitus S  
Reset Portb.0  
Timer1 = Timerstart  
End If  
Return
```