```
001    #no_table : #no_data
002   symbol b0x = b0: symbol b1x = b1 : symbol b2x = b2 : symbol
b3x = b3 : symbol b4x = b4
003   symbol b15_last_band = B15 : symbol w5_fac = W5 : pullup
%10111110
004   if pinb.2 = 0 then : sound b.0,(70,400) goto DEFAULT : endif
005   gosub INIT
006
007   MAIN:
008     let b16 = pinsB & %00111110
009     if b16 = 62  then : on b1x goto MAIN, D7, BAND_UP, D6,
BAND_DWN ,CIV ,BO6, BO7,BO8, RELEASE : endif
010     b16 = 60 - b16/2 : on b16 goto  BOT5 ,BOT4,main,BOT3,main
,main,main,BOT2,main ,main,main,main,main,main,main,BOT1
011    BOT1: pause 10
012           if pinB.5 = 0 AND w9 < 301  then
013               w9 = w9 + 1
014                 b1x = 5
015              if w9 > 300   then : b1x = 6: sound b.0,(70,255 ) :
endif
016           endif : goto MAIN
017
018   BOT2:    w9 = w9 + 1 : b1x=0
019           if w9 > 10 then:  b1x = 7 : endif
020          sound b.0,(70,1)
021           if w3 > 1 then : w3 = w3 - 1 : endif
022           b17 = 20 :  gosub DIRECTION : goto MAIN
023
024   BOT3:    w9 = w9 + 1
025           b1x=0
026          if w9 > 10 then : b1x = 7 : endif
027          sound b.0,(70,1)
028           if w3 < W6 then : w3 = w3 + 1: endif
029           b17 = 20 : gosub DIRECTION : goto MAIN
030
031   BOT4:    if   w9 < 1001  then
032          w9 = w9 + 1 : b1x = 4
033          if w9 > 1000 then : b1x = 3 : sound b.0,(70,255 ) :
endif
034           endif : goto MAIN
035
036   BOT5:    if w9 < 1001  then
037            w9  = w9 + 1 : b1x = 2
038            if w9 > 1000 then : b1x = 1 : sound b.0,(70,255 ) :
endif
039            endif: goto MAIN
040
041     BO6: gosub COMMON : gosub  MID_BAND  : b17 = 3 :  gosub
DIRECTION : goto MAIN
042     BO7: gosub COMMON : gosub SCREEN    gosub EE_ENTER : w9 = 0:
goto MAIN
```

```
043     BO8: goto BC
044
045   RELEASE: w9 = 0 : w11 = w11 + 1: if w11 = 1000 then : let
outpinsa = %00000000: w11 = 0 : b1x = 0 : endif :goto MAIN
046
047   BAND_UP:
048    gosub COMMON:   b15_last_band = b15_last_band + 8
049      if b15_last_band = 120 then:  b15_last_band = 0 :  endif

050      b0x = b15_last_band + 5 : read b0x ,b28 : b0x =
b15_last_band + 6 : read b0x,B29
051     gosub fr_format : gosub SHOW_FR
052    goto MAIN
053
054   BAND_DWN:
055    gosub COMMON:  b15_last_band = b15_last_band - 8
056    if b15_last_band = 248 then : b15_last_band = 112: endif
057    b0x = b15_last_band + 5  : read b0x ,b28  : b0x =
b15_last_band + 6: read b0x,B29
058    gosub fr_format : gosub SHOW_FR
059   goto MAIN
060
061    MID_BAND:
062      b17 = b15_last_band + 1 : write b15_last_band, b8 : write
b17, b9
063      A1: sound b.0, (70,500)
064      b0x = b15_last_band :  b17 = b15_last_band + 1 :read b0x,b6
: read b17 ,B7
065      b0x = b15_last_band + 5  : read b0x ,b28 : b0x =
b15_last_band + 6: read b0x,B29
066      b0x = b15_last_band + 2  : read b0x,b10 :   b0x = b0x + 1
: read b0x,b11
067      w15 = w3
068      gosub FR_FORMAT
069      gosub FAC_SCREEN
070    return
071
072   FR_FORMAT: w10 = b28 * 1000 : w14 = B29*10 : w10 = w10 + w14 :
write 124,b15_last_band : return
073
074   SHOW_FR: setfreq m8: serout b.6, N2400,(254,128) : serout b.6,
N2400,(#w10, " ") : setfreq em64
075            pause 2000 : b1x = 8 : w9 = 0 : return
076
077   COMMON:    w9 = 0: b1x = 0 : sound b.0,(50,25) : return
078
079   EE_ENTER: write 122,b8 : write 123,b9 : b1x = 9 : w11 = 0 :
return
080
081   FAC_SCREEN:  setfreq m8 serout b.6, N2400,(254,141) : serout
b.6, N2400,(#w5_fac) :   setfreq em64 : return
082
```

```
083  DEF:  w12 = w12 * 100 : w12 = w12/w5_fac : return
084
085  DIRECTION:   if w3 = w4 then : gosub SCREEN : return : endif
086
087  ZUZ:
088     if w3 < w4  then:  gosub FIRST_1
089        else:           gosub FIRST_2
090     endif
091   if b1x = 0 then : gosub SCREEN : gosub EE_ENTER : endif
092   return
093
094  SCREEN:
095       if w15 > w4 then
096        w13 = w15 - w4
097        else w13 = w4 - w15
098       endif
099     w12 = w13 * w5_fac :  w12 = w12/100
100   if w15 < w4  then
101     w12 = w12 + w10
102       else
103     w12 = w10 - w12
104  endif
105  if b4 > 0 then: setfreq m8 : serout b.6, N2400,(254,128) :
serout b.6, N2400,(#w11," ",#w4,"  ") : b4=0 : goto DD : endif
106                  setfreq m8 : serout b.6, N2400,(254,128) :
serout b.6, N2400,(#w12," ",#w4,"  ")
107  DD:             setfreq m8 : serout b.6, N2400,(254,205) :
serout b.6, N2400,(#w13,"     ") : setfreq em64
108  return
109  BC:  w9 = w9 + 1
110       if w9 = 1500 then:  sound b.0,(50,100): b1x = 0
111        setfreq m8: serout b.6, N2400,(254,128) : serout b.6,
N2400,("  WAIT     " ): setfreq em64
112        gosub A1
113       b17 = 3: gosub DIRECTION : w9 = 0 : sound B.0, (60,200
): sound B.0, (50,200 )
114     goto MAIN
115   endif : goto MAIN
116
117  D6:  gosub COMMON
118      w15 = w4 : goto MAIN
119
120  D7: gosub common
121      w5_fac = 20000 / w13
122      b0x = b15_last_band + 2 :   write b0x,b10 :  b0x = b0x + 1
:   write b0x,b11
123      gosub FAC_SCREEN : gosub SCREEN
124      w3 = 10000/w5_fac : w3 = w4 - w3 : w15 = w3
125      b17 = b15_last_band + 1 : write b15_last_band, b6 : write
b17, b7
126      b17 = 3 : gosub DIRECTION
```

```
127     goto MAIN
128   FIRST_2:
129    w4 = w4 + 1
130    high A.3 : pause b17
131    low  A.0 : pause b17
132    high A.2 : pause b17
133    low  A.3 : pause b17
134    high A.1 : pause b17
135    low  A.2 : pause b17
136    high A.0 : pause b17
137    low  A.1 : pause b17
138    if w3 > w4  then
139     goto FIRST_2
140     endif
141    return
142
143   FIRST_1:
144    w4 = w4 - 1
145    high A.1  : pause b17
146    low  A.0  : pause b17
147    high A.2  : pause b17
148    low  A.1  : pause b17
149    high A.3  : pause b17
150    low  A.2  : pause b17
151    high A.0  : pause b17
152    low  A.3  : pause b17
153    if w3 < w4  then :  goto FIRST_1 : endif
154   return
155
156    CIV:  gosub COMMON : hSerPtr = 0
157    serout c.7, T1200, ($FE, $FE,$70,$E0,$3 ,$FD)
158    hserin [1000,main],0,10
159     get 3 ,b26
160     if b26 = 112 then
161      get 6 ,b26
162      get 7 ,b27
163      get 8 ,b1x
164      if b1x > 9 then  : b1x = b1x - 6  :  endif
165      if b1x > 19 then : b1x = b1x - 6  :  endif
166      if b1x > 29 then : b1x = b1x - 18 :  endif
167      if b1x = 28 then : b15_last_band = 80 : endif
168      if b1x = 24 then : b15_last_band = 72 : endif
169      if b1x = 21 then : b15_last_band = 64 : endif
170      if b1x = 18 then : b15_last_band = 56 : endif
171      if b1x = 14 then : b15_last_band = 48 : endif
172      if b1x = 10 then : b15_last_band = 40 : endif
173      if b1x = 7  then : b15_last_band = 32 : endif
174      if b1x = 5  then : b15_last_band = 24 : endif
175      if b1x = 3  then : b15_last_band = 16 : endif
176       w15 = b1x*1000 : b1x = 0
177       w11 = b26/16
```

```
178       w14 = b27/16
179       w12 = w14*16 : w12 = b27 - w12 : w12 = w12*10
180       w14 = w14*100
181       w11 = w11 + w12 + w14 + w15
182     gosub A1
183   w14 = w5_fac/100
184     if w11 > w10 then
185      w12 = w11 - w10 + w14
186       gosub DEF
187         w3 = w3 + w12
188       else
189        w12 = w10 - w11  + w14
190       gosub DEF
191      w3 = w3 - w12
192     endif
193       setfreq m8:  serout b.6, N2400,(254,192): serout b.6,
N2400,( #w11, " " ) :setfreq em64
194   endif
195    b4 = 1
196    sound b.0,(50,100) :  b1x= 0 :   setfreq m8: serout b.6,
N2400,(254,128) :serout b.6, N2400,("WAIT     " ): setfreq em64
197    b17 = 3 : gosub DIRECTION
198    sound B.0, (60,200 )
199   goto main
200
201     INIT:  setfreq em64:   settimer t1s_4
202
203       EEPROM 5, (1) :   EEPROM 6, (70)
204       EEPROM 13,(1) :   EEPROM 14,(90)
205       EEPROM 21,(3) :   EEPROM 22,(65)
206       EEPROM 29,(5) :   EEPROM 30,(00)
207       EEPROM 37,(7) :   EEPROM 38,(10)
208       EEPROM 45,(10) :  EEPROM 46,(12)
209       EEPROM 53,(14) :  EEPROM 54,(25)
210       EEPROM 61,(18) :  EEPROM 62,(10)
211       EEPROM 69,(21) :  EEPROM 70,(25)
212       EEPROM 77,(24) :  EEPROM 78,(95)
213       EEPROM 85,(28) :  EEPROM 86,(45)
214       EEPROM 93,(30)  : EEPROM 94,(00)
215       EEPROM 101,(55) : EEPROM 102,(10)
216       EEPROM 109,(55) : EEPROM 110,(20)
217       EEPROM 117,(55) : EEPROM 118,(30)
218
219       EEPROM  2  ,(20)    : EEPROM   3   ,(1)
220       EEPROM 10  ,(30)    : EEPROM  11   ,(1)
221       EEPROM 18  ,(40)    : EEPROM  19   ,(1)
222       EEPROM 26  ,(50)    : EEPROM  27   ,(1)
223       EEPROM 34  ,(14)    : EEPROM  35   ,(0)
224       EEPROM 42  ,(40)    : EEPROM  43   ,(0)
225
226       EEPROM 50 ,(105)    : EEPROM  51   ,(0)
```

```
227       EEPROM 58 ,(175)     : EEPROM  59   ,(0)
228       EEPROM 66 ,(169)     : EEPROM  67   ,(0)
229       EEPROM 74 ,(83)      : EEPROM  75   ,(0)
230       EEPROM 82 ,(28)      : EEPROM  83   ,(0)
231       EEPROM 90 ,(130)     : EEPROM  91   ,(1)
232       EEPROM 98 ,(140)     : EEPROM  99   ,(1)
233       EEPROM 106,(150)     : EEPROM 107   ,(1)
234       EEPROM 114,(160)     : EEPROM 115   ,(1)
235
236        EEPROM 0,(0)     : EEPROM 1,(5)
237         EEPROM 8,(0)     : EEPROM 9,(5)
238         EEPROM 16,(0)    : EEPROM 17,(5)
239         EEPROM 24,(0)    : EEPROM 25,(5)
240        EEPROM 32,(124) : EEPROM 33,(5)
241         EEPROM 40,(168) : EEPROM 41,(54)
242         EEPROM 48,(20)  : EEPROM 49,(80)
243         EEPROM 56,(102 ): EEPROM 57,(90)
244         EEPROM 64,(169) : EEPROM 65,(96)
245         EEPROM 72,(198) : EEPROM 73,(108)
246         EEPROM 80,(19)  : EEPROM 81,(137)
247         EEPROM 88,(214) : EEPROM 89,(181)
248         EEPROM 96,(0)    : EEPROM 97,(139)
249         EEPROM 104,(0)   : EEPROM 105,(140)
250         EEPROM 112,(0)   : EEPROM 113,(141)
251
252            EEPROM 120,(0)   : EEPROM 121, (255)
253         EEPROM 122,(20) : EEPROM 123, (80)
254         EEPROM 124,(48)
255
256       read 120,B12 : read 121, B13
257
258       read 122,b8 : read 123,b9
259       read 124,b15_last_band
260       read 125,b14
261
262       b0x = b15_last_band + 5  : read b0x ,b28 :
b0x=b15_last_band + 6:   read b0x, B29
263       gosub fr_format
264       b0x = b15_last_band + 2  :read b0x,b10: b0x = b0x + 1  :
read b0x,b11
265            b0x = b15_last_band  : read b0x,B30 : b0x  =b0x + 1
read b0x ,B31
266       pause 5000
267       setfreq m8 : serout b.6, N2400,(254,1)
268       gosub FAC_SCREEN
269       gosub SCREEN
270         w3 = w4
271         hsersetup B9600_64, %00
272         pause 1000
273  return
274  DEFAULT:
```

```
275    write 122,29
276    write 123,80
277    write 124,48
278
279    write 56,102
280    write 57,90
281    write 58,175
282    write 59,0
283
284    write 24,0
285    write 25,5
286    write 26,50
287    write 27 ,1
288
289    write 32,124
290    write 33,5
291    write 34,14
292    write 35 ,0
293
294    write 40,168
295    write 41,54
296    write 42,40
297    write 43 ,43
298
299    write 48,20
300    write 49,80
301    write 50,106
302    write 51,0
303
304    write 56,102
305    write 57,90
306    write 58,175
307    write 59,0
308
309    write 64,169
310    write 65,96
311    write 66,169
312    write 67,0
313
314    write 72,198
315    write 73,108
316    write 74,83
317    write 75,0
318
319    write 80,19
320    write 81,137
321    write 82,28
322    write 83,0
323
324    write 88,214
325    write 89,181
326    write 90,130
```

```
327     write 91,1
328
329     RESET
```