

# ALPINE ROAD-RACE

► *AJ and PJ Marson*  
 ● *Amstrad CPC-464*  
 ● *Bristol, Avon*

Race across open grassy plains, over great lakes, through the impenetrable darkness of a tunnel and, finally, over sparse desert-lands in the greatest race ever held on your Amstrad. Hear the pitch of the engine change as you accelerate and wrestle with your joystick as you overtake the other roadhogs on your stretch of road.

You've guessed it — Alpine Road-Race is a perspective car race game which gets its name from the traditional mountain range on the horizon.

Although predominantly Basic, the game runs extremely quickly and

without "flickers" due to using machine code for the time-consuming multi-colour graphics and the machine's flashing colour facility. This is a powerful feature that is often overlooked by Basic programmers trying to animate their programs.

To enter the program into your machine, follow these steps;

- Type in and run listing 1 — the Hex-loader.
- Enter the information from listing 2. To save typing, the Tab key has been defined to give a row of zeros.
- When all of the data has been entered, the loader will save the code. Save this somewhere well after the start of the tape — at least 40 on the counter.
- Type in and save listing 3 before the machine code on the tape.
- Rewind the tape and RUN" the program in.

On running, the title

screen will come up with some random best times. Two lines from the bottom of the screen, the current control method will be shown. This can be changed by pressing either J or K. Enter will start the game.

When the game starts, there will be two cars near the bottom of the screen. Yours is the higher of the two. If you collide with either of the other cars or steer yours off of the road, your car will explode and your game will end. If, however, you survive until the end of the desert stage, you will be congratulated and the computer will play a tune. If your time is good enough, you will be asked to enter your name for the best timetable.

**Conversion to disc:** Alter line 2130 to — 2130 MEMORY &807F:LOAD"!ALPCODE",&8080 etc.

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10 REM LOADER PROGRAM
20 MEMORY &807F
30 MODE 2
40 PRINT"TYPE IN THE MACHINE CODE
  AND CHECKSUM SEPARATED BY A COMMA"
50 PRINT"PRESS <TAB> FOR A LINE OF ZEROS."
60 PRINT:INPUT"START FROM WHERE ?",A$
70 IF A$="" THEN START=&8080 ELSE
  START=VAL("&H"+A$)
75 KEY DEF 68,0,141,141,141
80 KEY 141,STRING$(32,"0")+","000"+CHR$(13)
90 FOR A=START TO &8530 STEP 16
100 PRINT HEX$(A,4);": ";
110 INPUT" ",D$,CH$
120 IF LEN(D$)<>32 THEN PRINT CHR$(7)
  ;CHR$(27);"NOT ENOUGH DATA";CHR$(27):GOTO 1
  00
125 TOT=0
130 FOR B=0 TO 15
140 P=VAL("&H"+MID$(D$,B*2+1,2))
150 POKE A+B,P:TOT=TOT+P
160 NEXT B
170 IF TOT<>VAL("&H"+CH$) THEN PRINT
  CHR$(7);CHR$(27);"CHECKSUM ERROR"
  ;CHR$(27):
  GOTO 100
180 NEXT A
190 SAVE"ALPCODE",B,&8080,&4BF,&8480
200 END
  
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8080:00000000000000000000000000000000,000
8090:00000000000000000000000000000000,000
80A0:00000000000000000000000000000000,000
80B0:00000000000000000000000000000000,000
80C0:00003F11152A000000003F33372A0000,162
80D0:00000063220000003F2A11EBBB003F2A,30E
80E0:3F7BF3F3F3F33F2A3F7BF3F3F3F3F2A,9DE
80F0:3F7BF3F3F3F33F2A3F2A000000003F2A,5C1
8100:00000000000000000000000000000000,000
8110:00000000000000000000000000000000,000
8120:00000000000000000000000000000000,000
8130:00000000000000000000000000000000,000
8140:00000000000000000000000000000000,000
8150:00003F11152A000000003F63372A0000,192
8160:153F11EBBB153F00153FF3F3F3B73F00,682
8170:153FF3F3F3B73F00153F000000153F00,4CB
8180:00000000000000000000000000000000,000
  
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8190:00000000000000000000000000000000,000
81A0:00000000000000000000000000000000,000
81B0:00000000000000000000000000000000,000
81C0:00000000000000000000000000000000,000
81D0:00000000000000000000000000000000,000
81E0:000000041000000000152A33223F0000,114
81F0:00157BF3F33F000000152A00003F0000,333
8200:00000000000000000000000000000000,000
8210:00000000000000000000000000000000,000
8220:00000000000000000000000000000000,000
8230:00000000000000000000000000000000,000
8240:00000000000000000000000000000000,000
8250:00000000000000000000000000000000,000
8260:0000000000000000000000000410000000,041
8270:00003FF3B72A000000003F00152A0000,291
8280:00000000000000000000000000000000,000
8290:00000000000000000000000000000000,000
82A0:00000000000000000000000000000000,000
82B0:00000000000000000000000000000000,000
82C0:00000000000000000000000000000000,000
82D0:00000000000000000000000000000000,000
82E0:00000000000000000000000000000000,000
82F0:00000015B70000000000001515000000,0F4
8300:00000000000000000000000000000000,000
8310:00000000000000000000000000000000,000
8320:00002A050A0000000000008741000000,101
8330:00001515822A0000000000A4B0A0A0000,13F
8340:0000412A2F8200000000058797000000,23F
8350:00002A150500000000001F000A000000,06D
8360:00000000000000000000000000000000,000
8370:00000000000000000000000000000000,000
8380:0A00000A41004141414100000000A00,163
8390:0000001500000000054105004105410A,0F1
83A0:82000005000000000000158215820000,1B5
83B0:050005050A0041050041004B150F8200,191
83C0:820041150A000000041000A8782410A,281
83D0:000A05150A0A2A004100416B15000000,164
83E0:00002A0A00000A410A0A004100A0082,160
83F0:000005000000000082410000A414100,154
8400:00000000000000000000000000000000,000
8410:00000000000000000000000000000000,000
8420:0000000005820000000000A4B1500000,0F1
8430:000015000A8700000000000505000000,0B0
8440:0000058282820A000000082001FOAZA00,26A
8450:0000154B004100000000A15410A0000,10B
8460:000000820A0000000000000000000000,08C
8470:00000000000000000000000000000000,000
8480:018DB4218984C3D1BC00008D849284C3,77A
8490:9EB447524150484943D300DD56001E00,541
84A0:AFCB1ACB1B21808019E5DD6E02DD6603,72C
84B0:DD5E04DD5605CD1DBC010610E50E081A,619
84C0:13AE77230D20F8E1CD26BC10EFC900E1,789
84D0:7E23E5FE1BC8CD5ABB18F4CD0689F53E,914
84E0:FFESCDA5BBD106041A137723772310F8,755
84F0:F1C30CB9CDA53BCDD84D5CDCF84FF0A,AD0
8500:0B1BE1CDBB84CFC84FF0B1BC9DD7E00,899
8510:CDB4BBF5DD5603DD5E02DD21000DD19,798
8520:DD460DD6602DD6E0178FE00280BC5E5,707
8530:7ECDF484E123C110F5F1C3B4BB000000,8B0
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```
10 REM ALPINE ROAD-RACE
20 REM By A.J. & P.J.Marson
30 REM
40 GOTO 2100:REM INITIALISE PROGRAM
50 INK 4.6.26:INK 5.26.6
60 RESTORE
70 !GRAPHICS,X,Y,0
80 !GRAPHICS,INT(CX(0)),INT(CY(0)),FNCHAR(CY(0))
90 !GRAPHICS,INT(CX(1)),INT(CY(1)),FNCHAR(CY(1))
100 TI1=TIME
110 REM ***** LOOP *****
120 WHILE D<5000
130 D=D+250/S
140 OX=X
150 J=FNJ(CTRL)
160 S=S+(3 AND (J AND 2)=2 AND S<125)+((J AND 1)=1 AND
.S>5):SPEED INK S,S
170 SOUND 129,800,100,3,0,0,S/4 AND 31
180 X=X-(2 AND (J AND 4)=4)+(2 AND (J AND 8)=8)
190 A=0:GOSUB 340
200 A=1:GOSUB 340
210 !GRAPHICS,INT(OCX(0)),INT(OCY(0)),FNCHAR(OCY(0)):!
GRAPHICS,INT(CX(0)),INT(CY(0)),FNCHAR(CY(0))
220 IF OX<>X THEN !GRAPHICS,OX,Y,0;!GRAPHICS,X,Y,0
230 !GRAPHICS,INT(OCX(1)),INT(OCY(1)),FNCHAR(OCY(1)):!
GRAPHICS,INT(CX(1)),INT(CY(1)),FNCHAR(CY(1))
240 IF FNPOINT(X+5,Y-9)<>12 OR FNPOINT(X+10,Y-9)<>12 OR
R FNPOINT(X,Y-15)<>12 OR FNPOINT(X+14,Y-15)<>12 THEN G
OTO 1020
250 WEND
260 READ A:NN=NN+1:INK 3.A:IF NN=4 THEN TI2=TIME:GOTO
1490:REM FINISHED
270 D=0
280 CS(0)=CS(0)+8:CS(1)=CS(1)+8
290 IF NN=2 THEN INK 0.0:INK 6.0:INK 7.0 ELSE INK 0.11
:INK 6.26:INK 7.13
300 GOTO 120
310 REM DATA FOR CHANGING GROUND COLOUR
320 DATA 2,0,12,9
330 REM MOVE CAR#A
340 OCX(A)=CX(A):OCY(A)=CY(A)
350 CY(A)=CY(A)+(S-CS(A))/10
360 IF CY(A)>119 THEN CY(A)=15:GOTO 410:REM INITIALISE
370 IF CY(A)<15 THEN CY(A)=119:GOTO 410:REM INITIALISE
380 CX(A)=CX(A)+DX(A)*(CY(A)-OCY(A))
390 RETURN
400 REM INITIALISE CAR
410 DX=INT(RND*70)+37
420 DX(A)=(73-DX)/104
430 CX(A)=DX+DX(A)*(CY(A)-15)
440 RETURN
450 REM SET INKS
460 CALL &BD19:READ A:BORDER A:FOR C=0 TO N:READ A:INK
C.A:NEXT C
470 RETURN
480 DATA 0,11,1,0,9,6,26,26,13,3,13,21,26,13,8,6,3
490 DATA 1,1,24,20,6,26,0,2,8,10,12,14,16,18,22,1,16
500 DATA 0,0,0,0,0,0,0,0,0,0,11,0,0,0,0,0
510 REM SET UP SCREEN
520 ORIGIN 320,0
530 PRINT CHR$(23):CHR$(0)
540 WINDOW#0,1,20,12,25:PAPER#0,3:CLS#0
550 FOR A=-170 TO 170 STEP 4:MOVE A,0:DRAW 0,222,2:NEX
T A:REM DRAW ROAD
560 REM DRAW KERBS
570 C=4:L=45:Y=0:MOVE 174,0
580 WHILE L>=1
590 DRAW -170/222*L,L,C
600 C=C XOR 1
610 L=L*0.8
620 WEND
630 C=4:L=45:Y=0:MOVE -174,0
640 WHILE L>=1
650 DRAW 170/222*L,L,C
660 C=C XOR 1
670 L=L*0.8
680 WEND
690 REM DRAW MOUNTAINS
700 ORIGIN 0,0
710 H=20
720 A=-4
730 WHILE A<640
740 A=A+4:MOVE A,224:DRAW 0,H,7
750 H=(H+SGN(RND-0.5))*2)
760 H=H+(4 AND H<6)-(4 AND H>32)
770 WEND
780 REM DRAW SNOW
790 PRINT CHR$(23):CHR$(2):
800 FOR A=240 TO 256 STEP 2
810 MOVE 0,A:DRAW 640,0,6
820 NEXT A
830 A=-4
840 WHILE A<640
850 A=A+4*(INT(RND*4)+1)
860 PLOT A,238,6
870 WEND
880 PRINT CHR$(23):CHR$(0):
890 WINDOW#0,1,20,1,25
900 RETURN
910 REM SET UP VARIABLES
920 NN=0:REM SECTOR NUMBER
930 CY(0)=15:A=0:GOSUB 410:REM COMPUTER CAR#0
940 CY(1)=60:A=1:GOSUB 410:REM COMPUTER CAR#1
950 S=80:SPEED INK S,S:REM PLAYER SPEED
960 D=0:REM DISTANCE GONE IN SECTOR
970 CS(0)=40:CS(1)=45:REM COMPUTER CAR SPEEDS
980 Y=32:REM PLAYER'S CAR Y
990 IF CX(0)<80 THEN X=96 ELSE X=48:REM PLAYER'S CAR X
1000 RETURN
1010 REM PLAYER DEAD
1020 !GRAPHICS,X,Y,0:INK 4.6:INK 5.26
1030 FOR A=5 TO 7
1040 SOUND 129,0,50,15,0,0,INT(RND*31)+1
1050 !GRAPHICS,X,Y,A
1060 FOR D=1 TO 70:NEXT D
1070 !GRAPHICS,X,Y,A
1080 NEXT A
1090 WHILE SQ(1)>127:WEND
1100 WINDOW#0,1,20,1,25:SPEED INK 20,20
1110 PEN 10:LOCATE 6,13:PRINT CHR$(22):CHR$(1):A$="GA
ME OVER":CALL DBL,0A$,0:PRINT CHR$(22):CHR$(0):
1120 REM WAIT & ENTER TITLE SCREEN
1130 T=TIME:WHILE TIME<T+1500 AND INKEY(47)=-1:WEND
1140 WHILE INKEY$<>"":WEND
1150 REM TITLE SCREEN
1160 MODE 0
1170 RESTORE 490:N=15:GOSUB 460:REM RESTORE COLOURS
1180 WINDOW#1,4,17,4,15:PAPER#1,3:PEN#1,1
1190 REM SET-UP INKS
1200 PAPER 0:PEN 2
1210 A$=SPACE$(2)+"ALPINE ROAD-RACE"
1220 FOR A=1 TO LEN(A$)
1230 LOCATE 1,1:M$=RIGHT$(A$,A):CALL DBL,0M$,0
1240 FOR D=1 TO 50:NEXT D
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# File

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1250 NEXT A
1260 GOSUB 1970:REM PRINT HIGH SCORES
1270 LOCATE 1,17:PEN 4:PRINT"CONTROLS:-"
1280 PEN 7:PRINT" SPEED UP - A"
1290 PRINT" SLOW DOWN - Z"
1300 PRINT" LEFT - /"
1310 PRINT" RIGHT - \ "
1320 PEN 12:PRINT:PRINT"CHOOSE CONTROLS,J/K"
1330 PEN 15:LOCATE 6,24:IF CTRL=0 THEN PRINT"JOYSTICK"
ELSE PRINT"KEYBOARD"
1340 PEN 3:PRINT TAB(4);"ENTER TO PLAY."
1350 A$=""
1360 WHILE K=0 OR A$="" :A$=UPPER$(INKEY$):K=INSTR(1,"J
K"+CHR$(13),A$):WEND
1370 IF A$="J" THEN CTRL=0:GOTO 1330
1380 IF A$="K" THEN CTRL=1:GOTO 1330
1390 RESTORE 500:N=15:GOSUB 460:REM CLEAR INKS
1400 MODE 0
1410 LOCATE 6,7:PEN 10:A$="GOOD LUCK!":CALL DBL,@A$,0
1420 GOSUB 520:REM SET UP SCREEN
1430 GOSUB 920:REM SET UP VARIABLES
1440 CALL &BD19:INK 10,0
1450 PAPER#1,0:LOCATE#1,1,7:PRINT#1,SPACE$(40);:REM DE
LETE 'GOOD LUCK' MESSAGE
1460 RESTORE 480:N=15:GOSUB 460:REM SET INKS
1470 GOTO 50
1480 REM FINISHED SCREEN
1490 RESTORE 490:GOSUB 460:REM RESTORE INKS
1500 MODE 0
1510 PAPER 0:PEN 3:A$=" ALPINE ROAD-RACE"
1520 CALL DBL,@A$,0
1530 PEN 1:A$="CONGRATULATIONS!":GOSUB 1930
1540 PEN 2:A$="On reaching your":GOSUB 1930
1550 A$="objective":GOSUB 1930
1560 ET=ROUND((TI2-TI1)/300,2)
1570 A$="in"+STR$(ET)+" minutes.":GOSUB 1930
1580 GOSUB 1860:REM PLAY MUSIC
1590 IF ET>HI(4) THEN GOTO 1160
1600 MODE 0
1610 WINDOW#1,4,17,1,12:PAPER#1,3:PEN#1,1:CLS#1
1620 GOSUB 1970:REM PRINT HIGH SCORES
1630 LOCATE 6,14:PEN 2
1640 A$="GREAT TIME":CALL DBL,@A$,0
1650 PEN 12:PRINT STRING$(3,10);"Enter your name:-"
1660 WHILE INKEY$<>"":WEND
1670 HI$="****"
1680 A$="*":X=3:PAPER 3:PEN 1
1690 WHILE A$<>CHR$(13)
1700 MID$(HI$,X)=A$:X=(X MOD 3)+1
1710 LOCATE 9,20:CALL DBL,@HI$,0
1720 A$="":WHILE (A$<CHR$(32) OR A$>CHR$(122)) AND A$<
>CHR$(13):A$=UPPER$(INKEY$):WEND
1730 WEND
1740 A=0
1750 WHILE ET>HI(A)
1760 A=A+1
1770 WEND
1780 FOR D=4 TO A+1 STEP-1
1790 HI$(D)=HI$(D-1)
1800 HI(D)=HI(D-1)
1810 NEXT D
1820 HI(A)=HI$
1830 HI(A)=ET
1840 GOTO 1160
1850 REM CONGRATULATIONS
1860 CO=0:RESTORE 1910:REM INITIALISE
1870 READ NOTE:IF NOTE=-1 AND CO<>-1 THEN CO=CO+1:REST
ORE 1910:GOTO 1870 ELSE IF CO=2 THEN RETURN
1880 SOUND 1,NOTE,20,15,-(NOTE<>0)
1890 SOUND 4,NOTE*2,20,15,-(NOTE<>0)
1900 GOTO 1870
1910 DATA 60,53,47,45,60,0,45,47,45,40,53,0,53,47,45,3
6,40,40,45,45,47,53,47,60,0,0,0,0,-1
1920 REM PRINT A$ DOUBLE HEIGHT IN CENTRE OF LINE
1930 LOCATE 11-LEN(A$)/2,VPOS(#0)+3:REM SET CURSOR
1940 CALL DBL,@A$,0:REM PRINT STRING
1950 RETURN
1960 REM PRINT HIGH SCORES
1970 CLS#1
1980 PRINT#1," BEST TIMES":PRINT#1
1990 FOR A=0 TO 4
2000 N$=RIGHT$(SPACE$(6)+STR$(HI(A)),6)
2010 K=INSTR(1,N$,".")
2020 IF K=0 THEN N$=RIGHT$(N$+".00",6)
2030 IF K>4 THEN N$=RIGHT$(N$+"0",6)
2040 A$=" "+HI$(A)+" - "+N$
2050 CALL DBL,@A$,1
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2060 PRINT#1:PRINT#1
2070 NEXT A
2080 RETURN
2090 REM SET UP PROGRAM
2100 CALL &BC02:REM RESET COLOURS
2110 IF PEEK(&850D)=221 THEN 2140
2120 MODE 1:PAPER 0:PEN 1:LOCATE 14,12:PRINT"PLEASE WA
IT.":PEN 2:PRINT TAB(10);"LOADING MACHINE CODE."
2130 MEMORY &807F:LOAD"!",&8080:CALL &8480:REM LOAD IN
AND LOGON "GRAPHICS" RSX
2140 DIM CX(1),CY(1):REM COMPUTER CAR POSITIONS
2150 DIM OCX(1),OCY(1):REM DUMMY COMPUTER CAR POSITION
S
2160 DIM DX(1),CS(1):REM CAR MOVEMENT INFORMATION
2170 CTRL=1:REM DEFAULT TO KEYBOARD
2180 DBL=&850D:REM ADDRESS OF DOUBLE HEIGHT CHARACTERS
2190 ENV 1,10,-1,2
2200 DEF FNPOINT(X,Y)=TEST(X*4,Y*2):REM NEW VERSION OF
TEST
2210 DEF FNCHAR(Y)=INT(Y/25)+(Y<35 AND Y>25):REM CHOOSE
CORRECT SIZE FOR CAR
2220 DEF FNJ(CTRL)=(JOY(0) AND CTRL=0)+(CTRL=1 AND ((
INKEY(69)<>-1) AND 1)+((INKEY(71)<>-1) AND 2)+((INKEY(
30)<>-1) AND 4)+((INKEY(22)<>-1) AND 8)):REM 'REPLACE
S JOY(N) FUNCTION FOR JOYSTICK WHEN CTRL=0 AND KEYBOAR
D WHEN CTRL=1
2230 REM SET UP HIGH SCORES
2240 DIM HI$(4),HI(4)
2250 FOR A=0 TO 4
2260 FOR D=0 TO 2
2270 HI$(A)=HI$(A)+CHR$(INT(RND*26)+65)
2280 NEXT D
2290 HI(A)=150+20*A+ROUND(RND,2)
2300 NEXT A
2310 GOTO 1160:REM GOTO MAIN SCREEN
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