

```

641
642 LIST S, X, M, T
643 NLIST I
644 ; *****
645 ; * H V G C H E C K M A T E *
646 ; *****
647 ;
648 ;
649 ; M A C R O S
650 ;
651 DEF4X: MACR #A4X, #B4X, #C4X, #D4X
652 DEFB #A4X
653 DEFB #B4X
654 DEFB #C4X
655 DEFB #D4X
656 ENDM
657 WRECK MACR
658 DEFW 9, SHL 8+32
659 DEFB 0000B
660 ENDM
661 ;
662 ;
663 ; E Q U A T I O N S
664 ;
>0000 665 OLDWAY EQU 1-NWHDWR ; 1=DO OLD WAY 0=DO NEW WAY
>0001 666 NEWWAY EQU 1-OLDWAY ; OPPOSITE OF OLDWAY
667 ; VARIOUS EQU'S
>000C 668 RLMOVE EQU 1100 ; RIGHT AND LEFT MOVES
>0003 669 UDMOVE EQU 0011 ; UP AND DOWN MOVES
>0002 670 NOSTRT EQU 2 ; # OF GAMES BIT
>0003 671 NPLT EQU 3 ; # PLAYERS BIT
>0003 672 ANIMAX EQU 3 ; MAX # TICKS PER ANIMATION FRAM
>009C 673 XMAX EQU (BYTEPL-1)*4 ; MAX X COORD
>0015 674 YLINES EQU 21 ; # VERT BLOCKS
>000B 675 LOWY EQU 11 ; LOWEST Y COORD
>005B 676 YMAX EQU ((YLINES-1)*4)+LOWY ; MAX Y COORD
>0000 677 LOWX EQU 0 ; LOWEST X COORD
>0008 678 AMOVE EQU 8H ; AN ARBITRARY MOVE
>0009 679 MLEVOL EQU 09H ; MUSIC VOLUME
>0024 680 TDOPT EQU 100100B ; TIME DISPLAY OPTIONS
>0044 681 COUPT EQU 01000100B ; COUNT DOWN OPT
>0010 682 WRITWR EQU 010000B ; WRIT WITH MAGIC OR
683 ; PLAYER PACKET OFFSETS
>0000 684 LASTSW EQU 0 ; LAST SWITCH SETTING
>0001 685 LASTMV EQU 1 ; LAST ACTUAL MOVE
>0002 686 CURSW EQU 2 ; CURRENT SWITCH SETTING
>0003 687 ARROT EQU 3 ; ARROW ROTATION AMOUNT
>0004 688 ARRX EQU 4 ; ARROW X COORD
>0005 689 ARRY EQU 5 ; ARROW Y COORD
>0006 690 PSTAT EQU 6 ; PLAYER STATUS
691 ; PLAYER STATUS MASKS
>0080 692 ACTIVE EQU 80H
>0040 693 HUMAN EQU 40H
>0007 694 ACTBIT EQU 7 ; 1=ACTIVE 0=DEAD
>0006 695 HUMBIT EQU 6 ; 1=HUMAN 0=COMPUTER
696 ; SCREEN TABS
>0028 697 XTAB1 EQU ((BYTEPL/4)*4)

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>0050      698 XTAB2 EQU XTAB1*2
>0078      699 XTAB3 EQU XTAB1*3
>0014      700 YTAB EQU (((YLINES-1)/4)*4)
>001F      701 YTAB1 EQU YTAB+LOWY
>0033      702 YTAB2 EQU (2*YTAB)+LOWY
>0047      703 YTAB3 EQU (3*YTAB)+LOWY
           704 ; OFFSETS FOR EACH PLAYERS ROM DATA
>0000      705 NOTE0 EQU 0 ; EACH DIRECTIONS NOTES
>0001      706 NOTE1 EQU 1
>0002      707 NOTE2 EQU 2
>0003      708 NOTE3 EQU 3
>0004      709 PPATL EQU 4 ; PLAYER PAT ADDR LOW
>0005      710 PPATH EQU 5 ; PLAYER PAT ADDR HIGH
>0006      711 PCDOP EQU 6 ; PLAYER CHAR DISP OPT
>0007      712 PSPOSX EQU 7 ; X COORD OF PLAYER SCORE
>0008      713 PSPOSY EQU 8 ; Y COORD OF PLAYER SCORE
>0009      714 PSDOP EQU 9 ; PLAYER SCORE DISP OPT
           715 ; MORE EQU'S
>00F6      716 FORCE EQU 0F6H ; VAL TO FORCE RANDOM MOVE
>0004      717 WIDTH EQU 4H ; # PIXELS WIDE OF PLAYER PAT
>0004      718 HEIGHT EQU 4H ; # PIXELS HIGH OF PLAYER PAT
>0D20      719 ALLBY EQU ((YLINES*4)*BYTEPL) ; ALL BYTES ON A SCREEN
>41B3      720 START EQU (LOWY*BYTEPL)+NORMAL ; LOWEST ADDR OF PLAY FI
>0001      721 PATY EQU 1 ; #BYTES WIDE OF PLAYER PATTERN
>0004      722 PATX EQU 4 ; #BYTES HIGH OF PLAYER PATTERN
>0104      723 PATS EQU PATXS*GHL 8 OR PATYS*GHL 8 ; PATTERNS DIMENSIONS
>000F      724 JUS EQU 0FH ; ONLY JOY STICK BITS
>0008      725 CBLN EQU 8 ; COLOR BLOCK LENGTH
>0008      726 SBLN EQU 8 ; SOUND BLOCK LENGTH
>0000      727 WPN EQU 0
>0001      728 WPO EQU 1
>0002      729 WPPAL EQU 2
>0003      730 WPPAH EQU 3
>0005      731 WPXS EQU 5
>0004      732 WPYS EQU 4
           733 ;
           734 ;
           735 ;
           736 ORG NORMEM OF96H ; SHOULD BE EQUAL TO RSTART
           737 ; UNCLEARED RAM
4F96      738 UNCRAM EQU UNCRAM
4F96      739 CURSCORES DEFS 12 ; ALL CURRENT SCORES
           740 ; CLEARED
4FA2      741 CNOPL DEFS 1 ; CURRENT # PLAYERS
4FA3      742 PLIX DEFS 1 ; WHO IS CURRENT PLAYER
4FA4      743 CNOHUM DEFS 1 ; CURRENT # HUMANS
4FA5      744 TARRX DEFS 1 ; TEMP ARROW X COORD
4FA6      745 TARRY DEFS 1 ; TEMP ARROW Y COORD
4FA7      746 RMASK DEFS 1 ; ROTATE MASK
           747 PPACKS: ; START OF PLAYER PACKETS
4FA8      748 PLAY0: DEFS PSTAT+1
4FAF      749 PLAY1: DEFS PSTAT+1
4FB6      750 PLAY2: DEFS PSTAT+1
4FB0      751 PLAY3: DEFS PSTAT+1
4FC4      752 ENDRAM:
>4FA1      753 RSTART EQU BEGRAM-(ENDRAM-UNCRAM)+1 ; SHOULD BE RAM STA
           754 ORG 1328H
  
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1328          755 ONETIM:
          756          ; ONE TIME ONLY HOUSEKEEPING
1328 31964F   757          LD SP, UNCRAM
132B          758          SYSSUK GETPAR
132B FF      758 +          RST 56
132C 4D      758 +          DEFB GETPAR+1
          758 +          IF GETPAR. EQ. INTPC
          758 +          ENDIF
132D 3502    759          DEFW NOGAME
132F 82      760          DEFB 82H
1330 DC4F    761          DEFW CT7
1332          762          SYSSUK GETPAR
1332 FF      762 +          RST 56
1333 4D      762 +          DEFB GETPAR+1
          762 +          IF GETPAR. EQ. INTPC
          762 +          ENDIF
1334 2802    763          DEFW NOPLAY
1336 01      764          DEFB 1
1337 F34F    765          DEFW NUMPLY
1339          766          SYSSUK FILL
1339 FF      766 +          RST 56
133A 1B      766 +          DEFB FILL+1
          766 +          IF FILL. EQ. INTPC
          766 +          ENDIF
133B 964F    767          DEFW CURSCR
133D 0C00    768          DEFW 12
133F 00      769          DEFB 0
1340          770          FIRE
          771          ; RE-ENTRY POINT FROM END OF GAME
1340 F3      772          DI
1341 31964F   773          LD SP, UNCRAM
1344          774          SYSTEM INTPC
1344 FF      774 +          RST 56
1345 00      774 +          DEFB INTPC
          774 +          IF INTPC. EQ. INTPC
>0001        774 +INTPC DEFL 1
          774 +          ENDIF
          775          ; OUTPUT CONTROL BLOCK
1346          776          DO COLSET
1346 19      776 +          DEFB COLSET+1
1347 AA17    777          DEFW CBLOCK
1349          778          DO EMUSIC
1349 15      778 +          DEFB EMUSIC+1
          779          ; CLEAR JOYSTICKS
134A          780          DO FILL
134A 1B      780 +          DEFB FILL+1
134B E44F    781          DEFW OSWO
134D 0400    782          DEFW 4
134F 00      783          DEFB 0
          784          ; CLEAR ALL RAM DATA
1350          785          DO FILL
1350 1B      785 +          DEFB FILL+1
1351 A24F    786          DEFW CNOPL
1353 2200    787          DEFW . RES. (PLAY3+PSTAT)-CNOPL+1
1355 00      788          DEFB 0
1356          789          DO SETOUT
1356 17      789 +          DEFB SETOUT+1
  
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1357 BE      790      DEFB .RES. ((Y LINES*4)+LOWY)*2 ; VER BLK
1358 40      791      DEFB 40H+0      ; HOR COL BND
1359 08      792      DEFB 08H      ; INTER MODE
                793      ; CLEAR SCORE BLOCKS
135A        794      DO RECTAN
135A 1D      794 +    DEFB RECTAN+1
135B 0000    795      DEFW 0
135D A00B    796      DEFW 11. SHL 8+160
135F 55      797      DEFB 01010101B
1360        798      DO RECTAN
1360 1D      798 +    DEFB RECTAN+1
1361 8000    799      DEFW 0. SHL 8+128
1363        800      WRECK
1363 2009    800 +    DEFW 9. SHL 8+32
1365 00      800 +    DEFB 0000B
1366        801      DO RECTAN
1366 1D      801 +    DEFB RECTAN+1
1367 5800    802      DEFW 0. SHL 8+88
1369        803      WRECK
1369 2009    803 +    DEFW 9. SHL 8+32
136B 00      803 +    DEFB 0000B
136C        804      DO RECTAN
136C 1D      804 +    DEFB RECTAN+1
136D 2900    805      DEFW 0. SHL 8+40
136F        806      WRECK
136F 2009    806 +    DEFW 9. SHL 8+32
1371 00      806 +    DEFB 0000B
1372        807      DO RECTAN
1372 1D      807 +    DEFB RECTAN+1
1373 0000    808      DEFW 0. SHL 8+0
1375        809      WRECK
1375 2009    809 +    DEFW 9. SHL 8+32
1377 00      809 +    DEFB 0000B
1378        810      DO ACTINT
1378 0F      810 +    DEFB ACTINT+1
1379        811      EXIT
1379 02      811 +    DEFB XINTC
>0000      811 +INTRC DEFL 0
                812      ; INITIALIZE STARTING ADDRESS OF ARROWS
137A 212833 813      LD HL, RES. (YTAB2. SHL 8)+XTAB1
137D 22AC4F 814      LD (PLAY0+ARRX), HL
1380 217933 815      LD HL, RES. (YTAB2. SHL 8)+XTAB3
1383 22B34F 816      LD (PLAY1+ARRX), HL
1386 21501F 817      LD HL, RES. (YTAB1. SHL 8)+XTAB2
1389 22BA4F 818      LD (PLAY2+ARRX), HL
138C 215047 819      LD HL, RES. (YTAB3. SHL 8)+XTAB2
138F 22C14F 820      LD (PLAY3+ARRX), HL
                821      ; CLEAR FIELD
1392 CDB414 822      CALL CLEARF
                823      ; DISPLAY # GAMES
1395 DD210D02 824      LD IX, FNTSML
1399        825      SYSSUK DISNUM
1399 FF      825 +    RST 56
139A 37      825 +    DEFB DISNUM+1
                825 +    IF DISNUM. EQ. INTPC
                825 +    ENDIF
139B 4C      826      DEFB 76
  
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139C 02      827      DEFB 2
139D 24      828      DEFB TDOPT
139E 42      829      DEFB 42H
139F DC4F    830      DEFW CT7
13A1        831      DONTD:
13A1 3AF34F  832      ; GET # HUMANS
13A4 FE05    833      LD A, (NUMPLY)
13A6 3802    834      CP 5
13A8 3E04    835      JR C, GOTNPL-$
13AA        836      LD A, 4
13AA 32A44F  837      GOTNPL:
13AA 32A44F  838      LD (CNOHUM), A
13AA 32A44F  839      ; GET # PLAYERS:
13AA 32A44F  840      ; IF HUMANS=1 OR 0 OR > 4 THEN PLAYERS=4 ELSE PLA
13AD FE02    841      CP 2
13AF 3804    842      JR C, FPLAY-$
13B1 FE05    843      CP 5
13B3 3802    844      JR C, ALLHUM-$
13B5 3E04    845      LD A, 4
13B7 32A24F  846      ALLHUM: LD (CNOPL), A
13B7 32A24F  847      ; INITIALIZE THE PLAYER PACKETS
13B7 32A24F  848      ; B=CURR. # HUMANS
13B7 32A24F  849      ; C=CURR. # PLAYERS
13B7 32A24F  850      ; D=THIS PLAYER #
13BA 3AA44F  851      INTPC: LD A, (CNOHUM)
13BD 47      852      LD B, A
13BE 3AA24F  853      LD A, (CNOPL)
13C1 4F      854      LD C, A
13C2 1600    855      LD D, 0
13C4 7A      856      GTIX: LD A, D
13C5 CD5C16  857      CALL LDPL
13C8 C5      858      PUSH BC
13C9 D5      859      PUSH DE
13CA 7A      860      LD A, D
13CB C631    861      ADD A, 31H ; SET UP ASCII LITERAL
13CD DD5E04  862      LD E, (I+ARRX)
13D0 DD5605  863      LD D, (I+ARRY)
13D3 1D      864      DEC E
13D4 1D      865      DEC E
13D5 FD4E06  866      LD C, (I+PCDOP)
13D8        867      SYSTEM CHRDIS ; DISPLAY PLAYER# ON FIELD
13D8 FF      867 + RST 56
13D9 32      867 + DEFB CHRDIS#
13D9 32      867 + IF CHRDIS. EQ. INTPC
13D9 32      867 + ENDIF
13DA FD5E07  868      LD E, (I+PSPOX)
13DD FD5608  869      LD D, (I+PSPOY)
13E0 D5      870      PUSH DE
13E1        871      SYSTEM CHRDIS ; DISPLAY# ON SCORE BLOCK
13E1 FF      871 + RST 56
13E2 32      871 + DEFB CHRDIS
13E2 32      871 + IF CHRDIS. EQ. INTPC
13E2 32      871 + ENDIF
13E3 D1      872      POP DE
13E4 7B      873      LD A, E
13E5 C606    874      ADD A, 6
13E7 5F      875      LD E, A
  
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|------|----------|-----|---------|--------|--|----------------------------------|
| 13E8 | 14 | 876 | | INC | D | |
| 13E9 | 14 | 877 | | INC | D | |
| 13EA | 010104 | 878 | | LD | BC, PATYSZ. SHL 8+PATXSZ | |
| 13ED | FD6605 | 879 | | LD | H, (IY+PPATH) | |
| 13F0 | FD6E04 | 880 | | LD | L, (IY+PPATL) | |
| 13F3 | 3E10 | 881 | | LD | A, 00010000B | |
| 13F5 | | 882 | | SYSTEM | WRIT | ; WRIT PLAYER PAT IN SCORE BLOCK |
| 13F5 | FF | 882 | + | RST | 56 | |
| 13F6 | 24 | 882 | + | DEFB | WRIT | |
| | | 882 | + | IF | WRIT. EQ. INTPC | |
| | | 882 | + | ENDIF | | |
| 13F7 | D1 | 883 | | POP | DE | |
| 13F8 | D5 | 884 | | PUSH | DE | |
| 13F9 | DDE3 | 885 | | PUSH | IX | |
| 13FB | 7A | 886 | | LD | A, D | |
| 13FC | 0600 | 887 | | LD | B, 0 | |
| 13FE | 4A | 888 | | LD | C, D | |
| 13FF | 21964F | 889 | | LD | HL, CURSCR | |
| 1402 | 09 | 890 | | ADD | HL, BC | |
| 1403 | 09 | 891 | | ADD | HL, BC | |
| 1404 | 09 | 892 | | ADD | HL, BC | |
| 1405 | CDE313 | 893 | | CALL | DISPRS | ; DISP SCORES |
| 1408 | DDE1 | 894 | | POP | IX | |
| 140A | D1 | 895 | | POP | DE | |
| 140B | C1 | 896 | | POP | BC | |
| 140C | AF | 897 | | XOR | A | |
| 140D | B0 | 898 | | OR | B | |
| 140E | 28Q9 | 899 | | JR | Z, NOTNUM-\$ | |
| 1410 | 3ECO | 900 | | LD | A, ACTIVE+HUMAN | |
| 1412 | DD7706 | 901 | | LD | (IX+PPATH), A | |
| 1415 | 05 | 902 | | DEC | B | |
| 1416 | 1806 | 903 | | JR | CKNOFF-\$ | |
| 1418 | 00 | 904 | CKSUM3: | DEFB | 0 | |
| 1419 | 3E80 | 905 | NOTNUM: | LD | A, ACTIVE | |
| 141B | DD7706 | 906 | | LD | (IX+PPATH), A | |
| 141E | 14 | 907 | CKNOFF: | INC | D | |
| 141F | 0D | 908 | | DEC | C | |
| 1420 | AF | 909 | | XOR | A | |
| 1421 | B1 | 910 | | OR | C | |
| 1422 | 20A0 | 911 | | JR | NZ, GTR LIX-\$ | |
| 1424 | 3E03 | 912 | | LD | A, 3 | |
| 1426 | | 913 | CDOPT: | | | |
| 1426 | F5 | 914 | | PUSH | AF | |
| 1427 | | 915 | | SYSSUK | PAWS | |
| 1427 | FF | 915 | + | RST | 56 | |
| 1428 | 51 | 915 | + | DEFB | PAWS+1 | |
| | | 915 | + | IF | PAWS. EQ. INTPC | |
| | | 915 | + | ENDIF | | |
| 1429 | 05 | 916 | | DEFB | 5 | |
| 142A | 32A34F | 917 | | LD | (PLIX), A | |
| 142D | CD9114 | 918 | | CALL | UPMUZK | ; MAKE SOUND FOR COUNT DOWN |
| 1430 | F1 | 919 | | POP | AF | |
| 1431 | F5 | 920 | | PUSH | AF | |
| 1432 | C630 | 921 | | ADD | A, 30H | |
| 1434 | | 922 | | XYRELL | DE, (XTAB2-4), . RES. (YTAB2-4) | |
| 1434 | 00000000 | 922 | + | LD | DE, . RES. (. RES. (YTAB2-4)). SHL 8+((XTAB2-4)) | |
| 1438 | 0E44 | 923 | | LD | C, CDOPT | |

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143A          924          SYSTEM CHRDIS      ; DISPLAY COUNT DOWN #
143A FF      924 +        RST 56
143B 32      924 +        DEFB CHRDIS
                924 +        IF CHRDIS.EQ.INTPC
                924 +        ENDIF
143C          925          SYSSUK PAWS
143C FF      925 +        RST 56
143D 51      925 +        DEFB PAWS+1
                925 +        IF PAWS.EQ.INTPC
                925 +        ENDIF
143E 28      926          DEFB 40
143F          927          SYSTEM EMUSIC
143F FF      927 +        RST 56
1440 14      927 +        DEFB EMUSIC
                927 +        IF EMUSIC.EQ.INTPC
                927 +        ENDIF
1441 F1      928          POP AF
1442 3D      929          DEC A
1443 20E1    930          JR NZ,CDOWNL-*
1445 CDB414  931          CALL CLEARF
                932          ; INIT TICK COUNT
1448 CD4A16  933          CALL TICKIT
144B AF      934          XOR A
144C 32DD4F  935          LD (CNT),D
144F          936 LOOP
144F          937          SYSSUK SENTRY
144F FF      937 +        RST 56
1450 43      937 +        DEFB SENTRY+1
                937 +        IF SENTRY.EQ.INTPC
                937 +        ENDIF
1451 1402    938          DEFW ALKE
1453          939          SYSSUK DOI
1453 FF      939 +        RST 56
1454 45      939 +        DEFB DOIT+1
                939 +        IF DOIT.EQ.INTPC
                939 +        ENDIF
1455 5914    940          DEFW THETB
1457 18F6    941          JR LOOP
1459          942 THE: RC SCTO,ACTION
1459 41      942 +        DEFB SCTO+40H
145A 6C14    942 +        DEFW ACTION
                942 +        IF 0
                942 +        ENDIF
145C          943          RC SJ0,MOVJOY
145C 55      943 +        DEFB SJ0+40H
145D 8414    943 +        DEFW MOVJOY
                943 +        IF 0
                943 +        ENDIF
145F          944          RC SJ1,MOVJOY
145F 57      944 +        DEFB SJ1+40H
1460 8414    944 +        DEFW MOVJOY
                944 +        IF 0
                944 +        ENDIF
1462          945          RC SJ2,MOVJOY
1462 59      945 +        DEFB SJ2+40H
1463 8414    945 +        DEFW MOVJOY
                945 +        IF 0
  
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    945 +      ENDIF
1465          946 RC SJS,MOVJOY
1465 5B       946 + DEFBSJS+40H
1466 8414    946 + DEFWMOVJOY
           946 + IF 0
           946 + ENDIF
1468        947 RC SKYD,CALPIZ,+END
1468 53      947 + DEFBSKYD+40H
1469 8B14    947 + DEFWCALPIZ
           947 + IF 0+END
146B C0     947 + DEFBS0+END
           947 + ENDIF
146C        948 ACTION:
146C CD4A16  949 CALL TICKIT
           950 ; INCREMENT THE CURRENT PLAYER INDEX BY 1 UNTIL
           951 ; AN ACTIVE PLAYER IS FOUND THEN UPDATE HIM
146F 3AA34F  952 INCR LD A,(PLIX)
1472 3C      953 INC A
1473 E603    954 AND 03H
1475 32A34F  955 LD (PLIX),A ; CURR PLAYER IXC-CURR PL IX+1 M
1478 CD5C16  956 CALL LDPLIX
147B DDCB067E 957 BIT ACTBIT,(IX+PSTAT) ; TEST FOR ACTIVE PLAYER
147F 28EE    958 JR Z,INCR-$
1481 C3BC14  959 JP MOVEIT ; THE MAJOR EVENT
1484        960 MOVJOY
1484 D615    961 SUB SJO ; TAKE OFF WHATEVER
1486 CB3F    962 SRL A ; DIV BY 2
1488 C31E16  963 JP STALL
148B        964 CALPIZ:
148B CD4A16  965 CALL TICKIT
148E        966 SYSTEM PIZBRK
148E FF      966 + RST 56
148F 48      966 + DEFBSPIZBRK
           966 + IF PIZBRK=EQ,INTPC
           966 + ENDIF
1490 C9      967 RET
1491 3AA34F  968 UPMIN LD A,(PLIX)
1494 CD5C16  969 CALL LDPLIX
1497 DD7E03  970 LD A,(IX+AROT)
149A 0603    971 LD B,3
149C        972 TSTB
149C 0F      973 RRCA
149D 3802    974 JR C,GOTEST-$
149F 10FB    975 DJNZ TSTB-$
14A1        976 GOTEST:
14A1 48      977 LD C,B
14A2 0600    978 LD B,0
14A4 FD09    979 ADD IY,BC
14A6 FD7E00  980 LD A,(IY+0)
14A9 D313    981 OUT (TONEC),A
14AB 3E09    982 LD A,MUSVOL
14AD D315    983 OUT (VOLC),A
14AF 3E11    984 LD A,0A4
14B1 D310    985 OUT (TONMO),A
14B3 C9      986 RET
14B4        987 CLEARF:
           988 ; CLEAR FIELD
  
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14B4          989          SYSSUK FILL
14B4 FF      989 +        RST 56
14B5 1B      989 +        DEFB FILL+1
                989 +        IF FILL. EQ. INTPC
                989 +        ENDIF
14B6 B841    990          DEFW STARTS
14B8 200D    991          DEFW ALLBYT
14BA 00      992          DEFB 0
14BB C9      993          RET
14BC          994 MOVEIT:
                995          ; THIS ROUTINE UPDATES A PLAYER'S POSITION
                996          ; INPUT PARAS ARE: IX=POINTER TO PLAYERS PACKET
                997          ; DURING ROUTINE B=CURRENT SWITCH C=LAST SWITCH
14BC DD4E00  998          LD C, (IX+LASTSW)
14BF DD4602  999          LD B, (IX+CURSW)
14C2 DDCBQ676 1000         BIT HUMBIT, (IX+PSTAT)
14C6 2003    1001         JR NZ, NOCUR-$ ; IF NOT HUMAN
14C8 AF      1002         ZSW: XOR A ; CLEAR A
14C9 47      1003         LD B, A ; CLEAR CURRENT SWITCH
14CA 4F      1004         LD C, A ; CLEAR LAST SW ENDIF
14CB 78      1005         NOCLD LD A, B ; IF CURR SW = 0
14CC B7      1006         OR A
14CD 2001    1007         JR NZ, RANMOV-$
14CF 41      1008         LD B, C ; THEN CURR SW<-LAST SW ENDIF
14D0 DD7000  1009         RANMOV LD (IX+LASTSW), B ; SAVE LAST SW
14D3 78      1010         LD A, B ; IF CURR SW=0
14D4 B7      1011         OR A
14D5 2005    1012         JR NZ, GOTM-$
14D7 0E00    1013         LD C, 0 ; LAST SW<-0
14D9 CD7F16  1014         CALL RANMOV ; GET RANDOM MOVE ENDIF
14DC          1015 GOTM:
14DC DD7E01  1016         LD A, (IX+LASTMV) ; GET LAST MOVE
14DF CDAC16  1017         CALL MOVST
14E2 2813    1018         JR Z, GOTM-$
                1019         ; ANY MOVE AND CURR SW
14E4 CDAA16  1020         CALL MOVANY
14E7 280E    1021         JR Z, GOTM-$
14E9 41      1022         LD B, C ; TRY LAST SWITCH
                1023         ; ANY MOVE
14EA CDAA16  1024         CALL MOVANY
14ED 2808    1025         JR Z, GOTM-$
14EF DD4601  1026         LD B, (IX+LASTMV) ; TRY LAST MOVE
                1027         ; ANY MOVE
14F2 CDAA16  1028         CALL MOVANY
14F5 203C    1029         JR NZ, CRASH-$
14F7          1030 GOTM:
                1031         ; A LEGIT MOVE HAS BEEN FOUND SO UPDATE THE GUY
14F7 DD7701  1032         LD (IX+LASTMV), A ; SAVE ACTUAL MOVE FOR LATER
14FA DD7703  1033         LD (IX+AROT), A ; ARROW ROTATION AMOUNT<-THE MOV
14FD DD5605  1034         LD D, (IX+ARRY)
1500 DD5E04  1035         LD E, (IX+ARRX)
1503 CD2515  1036         CALL ERASE
1506 FD6605  1037         LD H, (IY+PPATH)
1509 FD6E04  1038         LD L, (IY+PPATL)
150C 010104  1039         LD BC, PATYSZ. SHL 8+PATXSZ
150F 3E10    1040         LD A, WRITR
1511          1041         SYSTEM WRIT ; WRITE PLAYER PATTERN OVER ARRO

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PROPRIETARY INFORMATION
 Dan's Nesting Associates, Inc.

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1511 FF      1041 +      RST 56
1512 24      1041 +      DEFB WRIT
                1041 +      IF WRIT. EQ. INTPC
                1041 +      ENDIF
1513 3AA54F  1042      LD A, (TARRX)
1516 DD7704  1043      LD (IX+ARRX), A ; SAVE NEW ARROW X
1519 3AA64F  1044      LD A, (TARRY)
151C DD7705  1045      LD (IX+ARRY), A ; SAVE NEW ARROW Y
151F CD0016  1046      CALL ANIARR ; ANIMATE THE ARROW
1522 C39114  1047      JP UPMUZZ
1525         1048      ERASE:
1525 D5       1049      PUSH DE
1526         1050      SYSSUK RELAB1
1526 FF      1050 +      RST 56
1527 3B       1050 +      DEFB RELAB1+1
                1050 +      IF RELAB1. EQ. INTPC
                1050 +      ENDIF
1528 00       1051      DEFB 0
1529 EB       1052      EX DE, HL
152A 0600     1053      LD B, 0
152C 110104  1054      LD DE, PATXSZ. SHL 8+PATXSZ
152F         1055      SYSTEM BLANK
152F FF      1055 +      RST 56
1530 2A       1055 +      DEFB BLANK
                1055 +      IF BLANK. EQ. INTPC
                1055 +      ENDIF
1531 D1       1056      POP DE
1532 C9       1057      RET
1533         1058      CRASH:
                1059      ; A PLAYER HAS CRASHED. DESTROY HIS ARROW AND ELIM
                1060      ; HIM FROM THE GAME.
1533 016D17  1061      LD BC, EXPSTS
1536 118117  1062      LD DE, EXCOLS ; DEK-EXPLODE COLOR TABLE ADDR
1539 3E05     1063      LD A, 5
153B 21B217  1064      LD HL, EXPSTO
153E F5       1065      EXCHANGE:
153F C5       1066      EXCHANGE:
1540 D5       1067      EXCHANGE:
1541 E5       1068      EXCHANGE:
1542 1A       1069      LD A, (DE) ; AK-EXPLODE COLOR
1543 D300     1070      OUT (COLOR), A
1545 C5       1071      PUSH BC
1546 DD5605  1072      LD D, (IX+ARRY)
1549 DD5E04  1073      LD E, (IX+ARRX)
154C CD2515  1074      CALL ERASE
154F E1       1075      POP HL ; PAT ADDR
1550 3E10     1076      LD A, WRITR
1552 010104  1077      LD BC, PATYSZ. SHL 8+PATXSZ
1555         1078      SYSTEM WRIT ; WRIT EXPLOSION
1555 FF      1078 +      RST 56
1556 24      1078 +      DEFB WRIT
                1078 +      IF WRIT. EQ. INTPC
                1078 +      ENDIF
1557         1079      SYSSUK PAWS
1557 FF      1079 +      RST 56
1558 51       1079 +      DEFB PAWS+1
                1079 +      IF PAWS. EQ. INTPC

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PROPRIETARY INFORMATION
 Dave Nutting Associates, Inc.

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1559 07      1079 +      ENDIF
155A E1      1080      DEFB 7
155B 011808 1081      POP HL ; GET EXPLODE SOUND ADDR
155E EDB3    1082      LD BC, SBLFN. SHL. 8+SNDBX
1560 D1      1083      OTIR
1561 C1      1084      POP DE
1562 F1      1085      POP BC
1563 3D      1086      POP AF
1564 2807    1087      DEC A
1566 13      1088      JR Z, EXPFIN-$ ; LOOP COUNT EXPIRED
1567 03      1089      INC DE ; INC TO NEXT COLOR
1568 03      1090      INC BC ; BUMP UP TO NEXT PAT ADDR
1569 03      1091      INC BC
156A 03      1092      INC BC
156B 18D1    1093      INC BC
156D         1094      JR EXLOOP-$
156D         1095      EXPFIN:
156D FD5605  1096      LD D, (IY+PPATH)
1570 FD5E04  1097      LD E, (IY+PPATL) ; DEC-PLAYER PAT ADDR
1573 FD210000 1098      LD IY, 0
1577 FD19    1099      ADD IY, DE ; IY<-PLAYER PAT ADDR
1579 110004  1100      LD DE, 4. SHL. 8+0 ; D<-LOOP COUNT
157C FD7E00  1101      ST A, (IY) ; A<-BYTE OF PLAYER PATTERN
157F 21B841  1102      LD HL, STPTS
1582 01200D  1103      LD BC, ALLBYT
1585 EDB1    1104      STI
1587 2005    1105      CPIR
1589 03      1106      JR NZ, RESTOM-$
158A 2B      1107      INC BC
158B 73      1108      DEC HL
158C 18F7    1109      LD (HL), STLOG-$
158E FD23    1110      RESTOM: INC IY
1590 15      1111      DEC D
1591 20E9    1112      JR NZ, STOMP-$
1593 DDCB0676 1113      BIT HUMBIT, (IX+PSTAT) ;
1597 2804    1114      JR Z, KILLST-$ ; IF HUMAN
1599 21A44F  1115      LD HL, CHUM
159C 35      1116      DEC (HL) ; DEC CURRENT # HUMANS
159D DDCB06BE 1117      KILLST: RES ACTBIT, (IX+PSTAT) ; BILL STATUS
15A1 0E04    1118      ; INC ALL ACTIVE PLAYERS SCORES
15A3         1119      LD C, 4
15A3 0D      1120      BUMPUM: DEC C
15A4 79      1121      LD A, C
15A5 CD5C16  1122      CALL LDPLIX
15A8 DDCB067E 1123      BIT ACTBIT, (IX+PSTAT)
15AC 2818    1124      JR Z, BUMPCK-$
15AE 0600    1125      LD B, 0
15B0 C5      1126      PUSH BC
15B1 79      1127      LD A, C
15B2 21964F  1128      LD HL, CURSCR
15B5 09      1129      ADD HL, BC
15B6 09      1130      ADD HL, BC
15B7 09      1131      ADD HL, BC
15B8 37      1132      SCF
15B9 CDE315  1133      CALL DISPSC
15BC C1      1134      POP BC
15BC         1135

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PROPRIETARY INFORMATION
 Dave Autry
 Dave Autry
 Dave Autry

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15BD          1136          SYSTEM INCSCR
15BD FF       1136 +      RST 56
15BE 54       1136 +      DEFB INCSCR
                  1136 +      IF INCSCR. EQ. INTPC
                  1136 +      ENDIF
15BF 79       1137          LD A, C
15C0 C5       1138          PUSH BC
15C1 B7       1139          OR A ; RESET CARRY
15C2 CDE315   1140          CALL DISPSC
15C5 C1       1141          POP BC
15C6          1142 BUMPCK:
15C6          1143          SYSSUK PAWS
15C6 FF       1143 +      RST 56
15C7 51       1143 +      DEFB PAWS+1
                  1143 +      IF PAWS. EQ. INTPC
                  1143 +      ENDIF
15C8 1E       1144          DEFB 30
15C9 79       1145          LD A, C
15CA B7       1146          OR A
15CB 20D6     1147          JR NZ, BUMPEM-$
                  1148          ; DEC CURR # PLAYERS
                  1149          ; IF CURR # PLAYERS LEQ 0 GO TO END GAME
15CD 21A24F   1150          LD HL, #PL
15D0 35       1151          DEC (HL)
15D1 35       1152          DEC (HL)
15D2 2802     1153          JR Z, ENCHK-$
15D4 34       1154          INC (HL)
15D5 C9       1155          RET
15D6          1156 ENCHK:
15D6 3ADC4F   1157          LD A, (C7)
15D9 3D       1158          DEC A
15DA 27       1159          DAA
15DB 32DC4F   1160          LD (C7), A
15DE C24013   1161          JP NZ, FRET
15E1          1162          SYSTEM QUIT
15E1 FF       1162 +      RST 56
15E2 78       1162 +      DEFB QUIT
                  1162 +      IF QUIT EQ. INTPC
                  1162 +      ENDIF
15E3          1163 DISPSC:
                  1164          ; DISPLAY SCORE
                  1165          ; A=PLAYER#
                  1166          ; HL->LAST BYTE OF SCORE
15E3 FD4E09   1167          LD C, (PSDOP)
15E6 3004     1168          JR NC, NOTXOR-$
15E8 CBA1     1169          RES MROR, C
15EA CBE9     1170          SET MRXOR, C
15EC          1171 NOCUR:
15EC FD5E07   1172          LD E, (IY+PSPOSX)
15EF FD5608   1173          LD D, (IY+PSPOSY)
15F2 3E0C     1174          LD A, 12
15F4 83       1175          ADD A, E
15F5 5F       1176          LD E, A
15F6 14       1177          INC D
15F7 0643     1178          LD B, 43H
15F9 DD210D02 1179          LD IX, FNTSML
15FD          1180          SYSTEM DISNUM
  
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PROPRIETARY INFORMATION
 Data Molding Associates, Inc.

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```

15FD FF      1180 +      RST 56
15FE 36      1180 +      DEFB DISNUM
              1180 +      IF DISNUM.EQ.INTPC
              1180 +      ENDIF
15FF C9      1181      RET
1600         1182 ANIARR:
              1183      ; ANIMATE THE ARROW
              1184      ; INPUT AND OUTPUT IS IX WHO STAYS THE SAME
              1185      ; DESTROYS ALL OTHER REGISTERS
1600 DDCB067E 1186      BIT ACTBIT, (IX+PSTAT)
1604 C8       1187      RET Z      ; EXIT IF NOT ACTIVE
1605 DD7E03   1188      LD A, (IX+AROT)
1608 CD2F17   1189      CALL GETROT      ; HL<-ARROW PAT ADDR
160B DD5605   1190      LD D, (IX+ARRY)
160E DD5E04   1191      LD E, (IX+ARRX)
1611 E5       1192      PUSH HL
1612 CD2515   1193      CALL ERASE
1615 E1       1194      POP HL
1616 010104   1195      LD BC, PATYSZ.SHL.8+PATXSZ
1619 3E10     1196      LD A, WRITOR
161B         1197      SYSTEM WRIT
161B FF       1197 +      RST 56
161C 24       1197 +      DEFB WRIT
              1197 +      IF WRIT.EQ.INTPC
              1197 +      ENDIF
161D C9      1198      RET
161E         1199 STA:
              1200      ; THIS ROUTINE TAKES CARE OF ARROW ANIMATION
              1201      ; AND SHOWING A PLAYER HIS CURRENT JOY STICK POSIT
              1202      ; A=WHICH PLAYER:
              1203      ; B=JOY STICK BITS
161E CD5C16   1204      CALL LDPLX      ; IX<-ADDR OF PLAYER PACKET
1621 AF       1205      XOR A
1622 B0       1206      OR B
1623 2003     1207      JR NZ, STORIT-$
1625 DD7E02   1208      LD A, (IX+CURSW)
1628 DD7702   1209      LD (IX+CURSW), A
162B DDAE01   1210      XOR (IX+LASTMV) ; AK-DIFFERENCE FROM LAST MOVE
162E 2812     1211      JR Z, GETM-$ ; IF DIFFERENCE=0 USE LAST MOVE
1630 EEOC     1212      XOR RLMOVE
1632 280E     1213      JR Z, GETM-$
1634 EEOC     1214      XOR RLMOVE
1636 EEO3     1215      XOR UDMOVE
1638 2808     1216      JR Z, GETM-$
163A EEO3     1217      XOR UDMOVE
163C DDCB0676 1218      HUMB: BIT HUMBIT, (IX+PSTAT)
1640 2003     1219      JR NZ, GOTIT-$ ; IF HUMAN WE'VE GOT IT
1642 DD7E01   1220      GETM: LD A, (IX+LASTMV) ; GET LAST MOVE
1645 DD7703   1221      GOTM: LD (IX+AROT), A ; STORE ARROW ROTATION
1648 18B6     1222      JR ANIARR-$
164A         1223 TICKIT:
              1224      ; TICK COUNT<-(8-CURR # PLAYERS)
164A 3AA44F   1225      LD A, (CNOHUM)
164D B7       1226      OR A
164E 3E02     1227      LD A, 2
1650 2806     1228      JR Z, STICK-$
1652 21A24F   1229      LD HL, CNOPL
  
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PROPRIETARY INFORMATION
 Atari Marketing, Inc.

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1655 3E08      1230      LD      A,8
1657 96        1231      SUB     (HL)
1658 32D54F    1232      STICK:  LD     (CT0),A
165B C9        1233      RET
165C          1234      LDPLIX:
165C          1235      LDPLIY:
1236          ;LOAD IY WITH POINTER TO CURR PLAYER ROM DATA
1237          ;LOAD IX WITH A POINTER TO CURRENT PLAYER PACKET
1238          ;A=PLAYER# MUST BE GEQ 0 & LEQ 3
165C D5        1239      PUSH  DE
165D E5        1240      PUSH  HL
165E          1241      SYSSUK INDEXW
165E FF        1241 +      RST   56
165F 5B        1241 +      DEFB  INDEXW+1
1241 +      IF   INDEXW.EQ.INTPC
1241 +      ENDIF
1660 6F16      1242      DEFW  ROMTBL
1662 D5        1243      PUSH  DE
1663 FDE1      1244      POP   IY
1665          1245      SYSSUK INDEXW
1665 FF        1245 +      RST   56
1666 5B        1245 +      DEFB  INDEW+1
1245 +      IF   INDEW.EQ.INTPC
1245 +      ENDIF
1667 7716      1246      DEFW  RAMTB
1669 D5        1247      PUSH  DE
166A DDE1      1248      POP   IX
166C E1        1249      POP   HL
166D D1        1250      POP   DE
166E C9        1251      RET
166F 4517      1252      ROMTBL: DEFW  PLR0
1671 4F17      1253      DEFW  PLR0
1673 5917      1254      DEFW  PLR0
1675 6317      1255      DEFW  PLR0
1677 A84F      1256      RAMTBL: DEFW  PLAY
1679 AF4F      1257      DEFW  PLAY
167B B64F      1258      DEFW  PLAY
167D BD4F      1259      DEFW  PLAY
167F          1260      RAMMOV:
1261          ; GENERATE A RANDOM MOVE FOR THE PLAYER PACKET POI
1262          ; INPUT AND OUTPUT:
1263          ; B=CURRENT SWITCH C=LAST SWITCH
167F          1264      SYSSUK RANGED
167F FF        1264 +      RST   56
1680 77        1264 +      DEFB  RANGED+1
1264 +      IF   RANGED.EQ.INTPC
1264 +      ENDIF
1681 20        1265      DEFB  32
1682 B7        1266      OR    A          ; TIME TO CHANGE DIRECTION?
1683 2808      1267      JR    Z,NEWMOV-*
1685 DD4601    1268      LD    B,(IX+LASTMV) ; USE LAST MOVE
1688 78        1269      LD    A,B
1689 CDAC16    1270      CALL MOVST
168C C8        1271      RET    Z          ; LAST MOVE IS GOOD ENOUGH
168D          1272      NEWMOV: SYSSUK RANGED
168D FF        1272 +      RST   56
168E 77        1272 +      DEFB  RANGED+1

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PROPRIETARY INFORMATION

DO NOT REPRODUCE

David Williams & Associates

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1272 + IF RANGED. EQ. INTPC
1272 + ENDFIF
168F 04 1273 DEFB 4
1690 47 1274 LD B, A
1691 04 1275 INC B
1692 3E80 1276 LD A, 80H
1694 07 1277 SHFTIT: RLCA
1695 10FD 1278 DJNZ SHFTIT-$
1697 47 1279 LD B, A
1698 3E08 1280 RANFIN: LD A, 08H
169A CDAC16 1281 CALL MOVTST
169D 2002 1282 JR NZ, ANYMOV-$
169F 47 1283 LD B, A
16A0 C9 1284 RET
16A1 060F 1285 ANYMOV: LD B, 0FH ; TRY ALL MOVES
16A3 3E08 1286 LD A, 08H
16A5 CDAC16 1287 CALL MOVTST
16A8 47 1288 LD B, A
16A9 C9 1289 RET
16AA 1290 MOVANY: LD A, AMOVE
16AA 3E08 1291 LD A, AMOVE
16AC 1292 MOVTST:
1293 ; TEST THE NEW MOVE FOR VALIDITY
1294 ; THE INPUTS AND OUTPUTS
1295 ; B=A SET OF MOVES TO BE TESTED (IS UNCHANGED)
1296 ; C=UNCHANGED
1297 ; A=FIRST MOVE TO TEST, VALUE OF GOOD MOVE ON OUTPUT
1298 ; DE, HL=RETURNED UNCHANGED
1299 ; D=# ROTATES
1300 ; Z FLAG=Z IF GOOD MOVE FOUND(A CONTAINS FIRST GOO
1301 ; Z FLAG=NZ IF NO GOOD MOVES FOUND(IN B)
16AC D5 1302 PUSH DE
16AD 1608 1303 LD D, 8 ; INIT ROTATES
16AF 0F 1304 ROTMSK: RRCA ; ROTATE TO NEXT MOVE
16B0 5F 1305 LD E, A
16B1 A0 1306 AND B
16B2 CDC016 1307 CALL CHKMO ; CHECK MOVE
16B5 7B 1308 LD A, E
16B6 2806 1309 JR Z, MOVEXT-$ ; FOUND ONE
16B8 15 1310 DEC D ; DEC ROTATES
16B9 20F4 1311 JR NZ, ROTMSK-$
16BB 37 1312 SCF ; NO GOOD MOVES
16BC CB12 1313 RL D ; SET Z FLAG=NZ
16BE D1 1314 MOVEXT: POP DE
16BF C9 1315 RET
16C0 1316 CHKMO:
1317 ; CHECK THE MOVE IN A FOR BEING UNOCCUPIED
1318 ; INPUT AND OUTPUT:
1319 ; A=UP, DOWN, RIGHT OR LEFT BIT (RETURNED UNCHANGED)
1320 ; Z FLAG=Z IF MOVE IN A IS TO AN EMPTY POSITION
1321 ; Z FLAG=NZ IF MOVE IN A IS BAD
1322 ; BC, DE, HL RETURNED UNTOUCHED
1323 ; IX=POINTER TO CURRENT PLAYER PACKET
1324 ; LOCAL TO THIS ROUTINE:
1325 ; D=TEMP X COORD OF ARROW
1326 ; E=TEMP Y COORD OF ARROW
16C0 C5 1327 PUSH BC
  
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PROPRIETARY INFORMATION

DO NOT REPRODUCE

Dave Nutting

| | | | | | | |
|------|--------|--------|---------|--------|-------------------|-------------------------------------|
| 16C1 | D5 | 1328 | | PUSH | DE | |
| 16C2 | E5 | 1329 | | PUSH | HL | |
| 16C3 | F5 | 1330 | | PUSH | AF | |
| 16C4 | DD5604 | 1331 | | LD | D, (IX+ARRX) | ; GET X COORD OF ARROW |
| 16C7 | DD5E05 | 1332 | | LD | E, (IX+ARRY) | ; GET Y COORD OF ARROW |
| 16CA | CB57 | 1333 | TLEFT: | BIT | CHLEFT, A | |
| 16CC | 280A | 1334 | | JR | Z, TRIGHT-\$ | |
| 16CE | 7A | 1335 | | LD | A, D | ; GOT A LEFT MOVE |
| 16CF | FE00 | 1336 | | CP | LOWX | |
| 16D1 | 282F | 1337 | | JR | Z, BADMOV-\$ | ; ALREADY AT LOWEST X |
| 16D3 | D604 | 1338 | | SUB | WIDTH | ; DEC TEMP X BY 1 POSITION |
| 16D5 | 57 | 1339 | | LD | D, A | |
| 16D6 | 1830 | 1340 | | JR | LOOKSQ-\$ | |
| 16D8 | CB5F | 1341 | TRIGHT: | BIT | CHRIGHT, A | |
| 16DA | 280A | 1342 | | JR | Z, TUP-\$ | |
| 16DC | 7A | 1343 | | LD | A, D | ; GOT A RIGHT MOVE |
| 16DD | FE9C | 1344 | | CP | XMAX | |
| 16DF | 3021 | 1345 | | JR | NC, BADMOV-\$ | ; ALREADY GEQ MAX X |
| 16E1 | C604 | 1346 | | ADD | A, WIDTH | |
| 16E3 | 57 | 1347 | | LD | D, A | |
| 16E4 | 1822 | 1348 | | JR | LOOKSQ-\$ | |
| 16E6 | CB47 | 1349 | TUP: | BIT | CHUP, A | |
| 16E8 | 280A | 1350 | | JR | Z, TDOWN-\$ | |
| 16EA | 7B | 1351 | | LD | A, E | ; GOT AN UP MOVE |
| 16EB | FE0B | 1352 | | CP | LOWY | |
| 16ED | 2813 | 1353 | | JR | Z, BADMOV-\$ | ; ALREADY AT LOWEST Y |
| 16EF | D604 | 1354 | | SUB | HEIGHT | ; DEC TEMP Y BY 1 POSITION |
| 16F1 | 5F | 1355 | | LD | E, A | |
| 16F2 | 1814 | 1356 | | JR | LOOKSQ-\$ | |
| 16F4 | CB4F | 1357 | TDOWN: | BIT | CHDOWN, A | |
| 16F6 | 280A | 1358 | | JR | Z, BADMOV-\$ | |
| 16F8 | 7B | 1359 | | LD | A, E | ; GOT A DOWN MOVE |
| 16F9 | FE5B | 1360 | | CP | YMAX | |
| 16FB | 2805 | 1361 | | JR | Z, BADMOV-\$ | ; ALREADY AT HIGHEST Y |
| 16FD | C604 | 1362 | | ADD | A, HEIGHT | ; INC TEMP Y BY 1 POSITION |
| 16FF | 5F | 1363 | | LD | E, A | |
| 1700 | 1806 | 1364 | | JR | LOOKSQ-\$ | |
| 1702 | F1 | 1365 | BADMOV: | POP | AF | |
| 1703 | 37 | 1366 | | SCF | | |
| 1704 | CB12 | 1367 | | RL | D | ; SET FLAG = NZ |
| 1706 | 1823 | 1368 | | JR | MOVED-\$ | |
| 1708 | | 1369 | LOOKSQ: | | | |
| | | 1370 | | | | ; SEE IF THE NEW SQUARE IS OCCUPIED |
| 1708 | D5 | 1371 | | PUSH | DE | |
| 1709 | D5 | 1372 | | PUSH | DE | |
| 170A | C1 | 1373 | | POP | BC | |
| 170B | 51 | 1374 | | LD | D, C | ; REVERSE X, Y FOR SYSTEM |
| 170C | 58 | 1375 | | LD | E, B | |
| 170D | | 1376 | | SYSSUK | RELAB1 | |
| 170D | FF | 1376 + | | RST | 56 | |
| 170E | 3B | 1376 + | | DEFB | RELAB1+1 | |
| | | 1376 + | | IF | RELAB1. EQ. INTPC | |
| | | 1376 + | | ENDIF | | |
| 170F | 00 | 1377 | | DEFB | 0 | |
| 1710 | E1 | 1378 | | POP | HL | |
| 1711 | EB | 1379 | | EX | DE, HL | |
| 1712 | 7E | 1380 | | LD | A, (HL) | |

PROPRIETARY INFORMATION
 Nothing to be reproduced

DO NOT REPRODUCE


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1713 B7      1381      OR      A          ; TEST SQUARE
1714 20EC    1382      JR      NZ, BADMOV-$
1716 012800  1383      LD      BC, BYTEPL
1719 09      1384      ADD     HL, BC
171A 7E      1385      LD      A, (HL)
171B B7      1386      OR      A
171C 20E4    1387      JR      NZ, BADMOV-$
171E 7A      1388      LD      A, D
171F 32A54F  1389      LD      (TARRX), A ; STORE TEMP ARROW X COORD
1722 7B      1390      LD      A, E
1723 32A64F  1391      LD      (TARRY), A ; STORE TEMP ARROW Y COORD
1726 F1      1392      POP     AF
1727 1600    1393      LD      D, 0
1729 CB3A    1394      SRL     D          ; SET Z FLAG=Z
172B E1      1395      MOVEND: POP     HL
172C D1      1396      POP     DE
172D C1      1397      POP     BC
172E C9      1398      RET
172F        1399      GETIND:
1400      ; HL←BASE ADDR OF ROTATED PATTERN
1401      ; AC←DIRECTION OF ROTATION
1402      ; IF A HAS MORE THAN 1 BIT SET THEN ONLY ONE IS US
172F 218A17  1403      LD      HL, 0
1732 CB47    1404      BIT     CHUP, A
1734 C0      1405      RET     NZ
1735 219217  1406      LD      HL, A DOWN
1738 CB4F    1407      BIT     CHDOWN, A
173A C0      1408      RET     NZ
173B 218E17  1409      LD      HL, A RIGHT
173E CB5F    1410      BIT     CHRIGH, A
1740 C0      1411      RET     NZ
1741 219617  1412      LD      HL, A LEFT
1744 C9      1413      RET
1414      ; START OF ROM DATA FOR EACH PLAYER.
1415      ; CONTAINS 4 PLAYER NOTES, PLAYER PATTERN ADDR
1416      ; , PLAYER CHAR DISP OPT
1417      ; PLAYER SCORE DISP OPT
1418      ; AND PLAYER SCORE POSITION
1745        1419      PLDMMO:
1745        1420      PNOTE0: DEF4X GO, GSO, AO, ASO
1745 FD      1420 +      DEFB   GO
1746 EE      1420 +      DEFB   GSO
1747 E1      1420 +      DEFB   AO
1748 D4      1420 +      DEFB   ASO
1749 9A17    1421      PPAT0:  DEFW   PPAT0
174B 18      1422      PCDD0:  DEFB   011000B
174C 04      1423      PSFUS0: DEFB   4
174D 01      1424      DEFB   1
174E 18      1425      PSDDP0: DEFB   011000B
174F        1426      PLRUM1:
174F        1427      PNOTE1: DEF4X B0, C1, CS1, D1
174F CS      1427 +      DEFB   B0
1750 BD      1427 +      DEFB   C1
1751 B2      1427 +      DEFB   CS1
1752 A8      1427 +      DEFB   D1
1753 9E17    1428      PPADR1: DEFW   PPAT1
1755 1C      1429      PCDDP1: DEFB   011100B
  
```

PROPRIETARY INFORMATION

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Dave Sawyer

| | | | | | | |
|------|------|------|---------|-------|--|----------------------|
| 1756 | 95 | 1430 | PSPOS1: | DEFB | 133 | |
| 1757 | 01 | 1431 | | DEFB | 1 | |
| 1758 | 1C | 1432 | PSDOP1: | DEFB | 011100B | |
| 1759 | | 1433 | PLROM2: | | | |
| 1759 | | 1434 | PNOTE2: | DEF4X | DS1, E1, F1, FS1 | |
| 1759 | 9F | 1434 | + | DEFB | DS1 | |
| 175A | 96 | 1434 | + | DEFB | E1 | |
| 175B | 9D | 1434 | + | DEFB | F1 | |
| 175C | 85 | 1434 | + | DEFB | FS1 | |
| 175D | A217 | 1435 | PPADR2: | DEFW | PPAT2 | |
| 175F | 1C | 1436 | PCDOP2: | DEFB | 011100B | |
| 1760 | 2D01 | 1437 | PSPOS2: | DEFW | 45+1. SHL 8 | |
| 1762 | 1C | 1438 | PSDOP2: | DEFB | 011100B | |
| 1763 | | 1439 | PLROM3: | | | |
| 1763 | | 1440 | PNOTE3: | DEF4X | G1, GS1, A1, AS1 | |
| 1763 | 7E | 1440 | + | DEFB | G1 | |
| 1764 | 77 | 1440 | + | DEFB | GS1 | |
| 1765 | 70 | 1440 | + | DEFB | A1 | |
| 1766 | 6A | 1440 | + | DEFB | AS1 | |
| 1767 | A617 | 1441 | PPADR3: | DEFW | PPAT3 | |
| 1769 | 18 | 1442 | PCDOP3: | DEFB | 011000B | |
| 176A | 5D01 | 1443 | PSPOS3: | DEFW | 93+1. SHL 8 | |
| 176C | 18 | 1444 | PCDOP3: | DEFB | 011000B | |
| | | 1445 | | | | ; EXPLOSION PATTERNS |
| 176D | | 1446 | XPATS: | | | |
| 176D | | 1447 | XPAT1: | DEF4X | 000010100B, 0000100B, 0 | |
| 176D | 00 | 1447 | + | DEFB | 0 | |
| 176E | 14 | 1447 | + | DEFB | 0010100B | |
| 176F | 14 | 1447 | + | DEFB | 00010100B | |
| 1770 | 00 | 1447 | + | DEFB | 0 | |
| 1771 | | 1448 | XPAT2: | DEF4X | 01000101B, 0000001B, 0 | |
| 1771 | 00 | 1448 | + | DEFB | 0 | |
| 1772 | 45 | 1448 | + | DEFB | 01000101B | |
| 1773 | 51 | 1448 | + | DEFB | 01000101B | |
| 1774 | 00 | 1448 | + | DEFB | 0 | |
| 1775 | | 1449 | XPAT3: | DEF4X | 00000101B, 01000000B, 00000001B, 01010000B | |
| 1775 | 05 | 1449 | + | DEFB | 00000101B | |
| 1776 | 40 | 1449 | + | DEFB | 0000000B | |
| 1777 | 01 | 1449 | + | DEFB | 00000001B | |
| 1778 | 50 | 1449 | + | DEFB | 01010000B | |
| 1779 | | 1450 | XPAT4: | DEF4X | 0010001B, 01000000B, 00000001B, 01000100B | |
| 1779 | 11 | 1450 | + | DEFB | 0010001B | |
| 177A | 40 | 1450 | + | DEFB | 0000000B | |
| 177B | 01 | 1450 | + | DEFB | 00000001B | |
| 177C | 44 | 1450 | + | DEFB | 01000100B | |
| 177D | | 1451 | XPAT5: | DEF4X | 0, 0, 0, 0 | |
| 177D | 00 | 1451 | + | DEFB | 0 | |
| 177E | 00 | 1451 | + | DEFB | 0 | |
| 177F | 00 | 1451 | + | DEFB | 0 | |
| 1780 | 00 | 1451 | + | DEFB | 0 | |
| | | 1452 | | | | ; EXPLOSION COLORS |
| 1781 | | 1453 | EXCOLS: | | | |
| 1781 | 07 | 1454 | + | DEFB | 7 | |
| 1782 | 03 | 1455 | + | DEFB | 3 | |
| 1783 | 07 | 1456 | + | DEFB | 7 | |
| 1784 | 03 | 1457 | + | DEFB | 3 | |
| 1785 | 77 | 1458 | + | DEFB | 077H | |

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1459 ;COUNT DOWN DISPLAY PACKET
1796 0400 1460 CDCOLR: DEFW 0100B+0.SHL.8
1461 ;TIMER DISPLAY PACKET
1798 0180 1462 TDPACK: DEFW 0001B+1000000B.SHL.8
1463 ;ARROW ANIMATION PATTERNS FOR EACH ROTATION
178A 1464 AUP:
178A 1465 DEF4X 00010100B,01010101B,01000001B,0
178A 14 1465 + DEFB 00010100B
178B 55 1465 + DEFB 01010101B
178C 41 1465 + DEFB 01000001B
178D 00 1465 + DEFB 0
178E 1466 ARIGHT:
178E 1467 DEF4X 00010100B,00000101B,00000101B,00010100B
178E 14 1467 + DEFB 00010100B
178F 05 1467 + DEFB 00000101B
1790 05 1467 + DEFB 00000101B
1791 14 1467 + DEFB 00010100B
1792 1468 AD
1792 1469 DEF4X 0,01000001B,01010101B,00010100B
1792 00 1469 + DEFB 0
1793 41 1469 + DEFB 01000001B
1794 55 1469 + DEFB 01010101B
1795 14 1469 + DEFB 00010100B
1796 1470 ALET
1796 1471 DEF4X 00010100B,01010000B,01010000B,00010100B
1796 14 1471 + DEFB 00010100B
1797 50 1471 + DEFB 01010000B
1798 50 1471 + DEFB 01010000B
1799 14 1471 + DEFB 00010100B
1472 ;PLAYER PATTERNS
179A 1473 PPA1: DEF4X 00000000B,10101000B,00101010B,00100000B
179A 08 1473 + DEFB 00000000B
179B A8 1473 + DEFB 10101000B
179C 2A 1473 + DEFB 00101010B
179D 20 1473 + DEFB 00100000B
179E 1474 PPA2: DEF4X 11111111B,11000011B,11000011B,11111111B
179E FF 1474 + DEFB 11111111B
179F C3 1474 + DEFB 11000011B
17A0 C3 1474 + DEFB 11000011B
17A1 FF 1474 + DEFB 11111111B
17A2 1475 PPA3: DEF4X 00001000B,11111100B,00111111B,00110000B
17A2 0C 1475 + DEFB 00001000B
17A3 FC 1475 + DEFB 11111100B
17A4 3F 1475 + DEFB 00111111B
17A5 30 1475 + DEFB 00110000B
17A6 1476 PPA4: DEF4X 10101010B,10000010B,10000010B,10101010B
17A6 AA 1476 + DEFB 10101010B
17A7 82 1476 + DEFB 10000010B
17A8 82 1476 + DEFB 10000010B
17A9 AA 1476 + DEFB 10101010B
1477 ;COLOR BLOCK
17AA 1478 CBLOCK:
17AA F8 1479 DEFB 0F8H
17AB F8 1480 DEFB 0F8H
17AC F8 1481 DEFB 0F8H
17AD F8 1482 DEFB 0F8H
17AE B5 1483 DEFB 0B5H

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PROPRIETARY INFORMATION

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|------|----|------|---------|------|--|--------------------|
| 17AF | 52 | 1484 | | DEFB | 052H | |
| 17B0 | F8 | 1485 | | DEFB | 0F8H | |
| 17B1 | 77 | 1486 | | DEFB | 077H | |
| | | 1487 | | | | ; EXPLOSION SOUNDS |
| 17B2 | | 1488 | EXPSND: | DEFB | 0EFH, 0FFH, 3FH, 0, 0FFH, 0FDH, 0F5H, 0F5H | |
| 17B2 | EF | 1488 | + | DEFB | 0EFH | |
| 17B3 | FF | 1488 | + | DEFB | 0FFH | |
| 17B4 | 3F | 1488 | + | DEFB | 3FH | |
| 17B5 | 00 | 1488 | + | DEFB | 0 | |
| 17B6 | FF | 1488 | + | DEFB | 0FFH | |
| 17B7 | FD | 1488 | + | DEFB | 0FDH | |
| 17B8 | F5 | 1488 | + | DEFB | 0F5H | |
| 17B9 | F5 | 1488 | + | DEFB | 0F5H | |
| 17BA | | 1489 | | DEFB | 08FH, 0EEH, 3EH, 0, 0FFH, 0FDH, 0F5H, 0F5H | |
| 17BA | 8F | 1489 | + | DEFB | 08FH | |
| 17BB | EE | 1489 | + | DEFB | 0EEH | |
| 17BC | 3E | 1489 | + | DEFB | 3EH | |
| 17BD | 00 | 1489 | + | DEFB | 0 | |
| 17BE | FF | 1489 | + | DEFB | 0FFH | |
| 17BF | FD | 1489 | + | DEFB | 0FDH | |
| 17C0 | F5 | 1489 | + | DEFB | 0F5H | |
| 17C1 | F5 | 1489 | + | DEFB | 0F5H | |
| 17C2 | | 1490 | | DEFB | 08FH, 088H, 38H, 0, 0FFH, 0FDH, 0F5H, 0F5H | |
| 17C2 | 4E | 1490 | + | DEFB | 04EH | |
| 17C3 | 88 | 1490 | + | DEFB | 088H | |
| 17C4 | 38 | 1490 | + | DEFB | 38H | |
| 17C5 | 00 | 1490 | + | DEFB | 0 | |
| 17C6 | FF | 1490 | + | DEFB | 0FFH | |
| 17C7 | FD | 1490 | + | DEFB | 0FDH | |
| 17C8 | F5 | 1490 | + | DEFB | 0F5H | |
| 17C9 | F5 | 1490 | + | DEFB | 0F5H | |
| 17CA | | 1491 | | DEFB | 08FH, 044H, 34H, 0, 0FFH, 0FDH, 0F5H, 0F5H | |
| 17CA | 48 | 1491 | + | DEFB | 048H | |
| 17CB | 44 | 1491 | + | DEFB | 044H | |
| 17CC | 34 | 1491 | + | DEFB | 34H | |
| 17CD | 00 | 1491 | + | DEFB | 0 | |
| 17CE | FF | 1491 | + | DEFB | 0FFH | |
| 17CF | FD | 1491 | + | DEFB | 0FDH | |
| 17D0 | F5 | 1491 | + | DEFB | 0F5H | |
| 17D1 | F5 | 1491 | + | DEFB | 0F5H | |
| 17D2 | | 1492 | | DEFB | 0, 0, 0, 0, 0, 0, 0, 0 | |
| 17D2 | 00 | 1492 | + | DEFB | 0 | |
| 17D3 | 00 | 1492 | + | DEFB | 0 | |
| 17D4 | 00 | 1492 | + | DEFB | 0 | |
| 17D5 | 00 | 1492 | + | DEFB | 0 | |
| 17D6 | 00 | 1492 | + | DEFB | 0 | |
| 17D7 | 00 | 1492 | + | DEFB | 0 | |
| 17D8 | 00 | 1492 | + | DEFB | 0 | |
| 17D9 | 00 | 1492 | + | DEFB | 0 | |
| 17DA | | 1493 | | END | | |

PROPRIETARY INFORMATION
 Dave Darling

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TOTAL ASSEMBLER ERRORS =