Bounce in Action!

24K Cassette or Disk

by David Plotkin

Bounce, written by Joel Gluck and published in ANALOG issue 15, was a lot of fun to play with, just as Joel predicted it would be. The obvious enhancements that sprang to mind included a higher resolution screen and multiple colors. Unfortunately, higher resolution (and more than four colors) means more points to draw, and BASIC slows to a crawl. Fortunately, Action! from OSS presents an alternative, so I translated and modified the program into Action! Try punching it in; I think you'll agree that the color patterns and dynamic "ball" are fascinating to watch. To use this updated version of Bounce, you must have the Action! cartridge installed in your Atari. The program works pretty much like the original: You draw "walls" with your joystick, then hit the space bar to start the ball bouncing. Hitting the space bar again stops the bounce, so you can draw more walls with your joystick, or erase by pushing the fire button. If you press the ESCAPE key while the bouncing is stopped, you will return to the menu screen to review the commands. The program uses Graphics 11, so there are fifteen colors on the screen, and the color of the line drawn changes each time the cursor bounces. The left arrow key (CONTROL *) changes the speed of the bouncing cursor; at the highest speed it's really moving. It can go even faster if you delete the DO...DO loops following the sound statements. You will lose the sounds of the bounce if you do, however. So have fun with this juiced-up version of Bounce.

Action! Listing.

MODULE
; BOUNCE from ANALOG magazine
; Issue 11-5
; In Gita Mode 11
BYTE key=764,x,y,console=53279, attract=77
PROC wallchex()
    IF x>78 THEN x=78 FI
    IF y>190 THEN y=190 FI
    IF x<1 THEN x=1 FI
    IF y<1 THEN y=1 FI
    RETURN

PROC menu()
    PrintE("Bounce from Analog Issue 415")
    PrintE("In (B) mode")
    PrintE("(W)all stick to draw walls")
    PrintE("(E)rase")
    PrintE("(H)it ESC to clear screen")
    PrintE("(U)se space to bounce")
    PrintE("(N)umber control ball speed")
    PrintE("Press any key to continue")
    key=255
    While key=255 Do od
    key=255
    RETURN

PROC drawscreen()
    BYTE curs=752
    Graphics(8)
    curs=1
    Menu()
    Graphics(11)
    curs=1
    SetColor(4,0,4) ;SetColor(4,0,0)
    color=15
    Plot(0,0)
    DrawTo(79,0)
    DrawTo(79,191)
    DrawTo(0,191)
    DrawTo(0,0)
    RETURN

PROC flash()
    color=9
    Plot(x,y)
    FOR ctrl=0 to 300 DO od
    Plot(x,y)
    FOR ctrl=0 to 300 DO od
    RETURN

PROC bounce()
    BYTE fate=37770,l=[8],PA,PB,6,
    kolor=111,time=[32]
    color=9
    PA=0
    PB=1
    Plot(x,y)
    IF key=33 THEN key=255 RETURN FI
    WHILE Locate(x+a,y+b)<15 Do
        color=kolor
        Plot(x,y)
        x=x+a
        y=y+b
        wallchex()
        color=9
        Plot(x,y)
        l=41
        FOR ctrl=0 to 5*time DO od
    OD
    IF key=7 THEN key=255 time=-32
    FI
    Sound(0,l,x+y+20,l,8)
    PA=Locate(x+a,y)
    PB=Locate(x,y+b)
    FOR ctrl=0 to 100 DO od
    SNDRST()
    l=0
    IF PA>2 AND PB>2 THEN
        A=A
        B=B
    ELSEIF PA>2 AND PB<3 THEN
        A=A
        color=2
        Plot(x,y)
        y=y+b
        color=9
        Plot(x,y)
    ELSEIF PB>2 AND PA<3 THEN
        B=B
        color=2
        Plot(x,y)
        x=x+a
        color=9
        Plot(x,y)
    ELSEIF fate=127 THEN
        B=B
        ELSE
        A=A
        FI
        kolor=kolor
        IF kolor>14 THEN
            kolor=1
        FI
        attract=0
    OD
    RETURN

PROC draw()
    BYTE qq
drawscreen()
    x=40
    y=98
    DO
        IF key=20 THEN
            key=255
            drawscreen()
        ELSEIF key=33 THEN
            key=255
            bounce()
        FI
        IF Stick(0)=15 THEN
            flash()
        ELSEIF Stick(0)=7 THEN
            x=x+1
        ELSEIF Stick(0)=6 THEN
            x=x+1
            y=y-1
        ELSEIF Stick(0)=14 THEN
            y=y+1
        ELSEIF Stick(0)=5 THEN
            x=x+1
            y=y-1
        ELSEIF Stick(0)=11 THEN
            x=x-1
        ELSEIF Stick(0)=10 THEN
            x=x-1
            y=y-1
        ELSEIF Stick(0)=13 THEN
            y=y+1
        ELSEIF Stick(0)=9 THEN
            x=x-1
            y=y+1
        FI
        wallchex()
        IF String(0)=0 THEN
            color=0
            flash()
        ELSE
            color=15
            FI
            Plot(x,y)
        IF Stick(0)>15 THEN
            qq=String(0)
            Sound(0,(200-x-y+x+y+2*qq),4)
            FOR ctrl=0 to 1000 DO od
            SNDRST()
        FI
    OD
    RETURN