Format
CALL MOTION(#sprite-number,vertical-velocity,horizonal-velocity[,...])

Cross Reference
SPRITE

Description
The MOTION subprogram enables you to change the velocity of one or more sprites.

The sprite-number is a numeric-expression whose value specifies the number of a sprite as assigned by the SPRITE subprogram.

The vertical- and horizonal-velocity are numeric-expressions whose values range from -128 to 127. If both values are zero, the sprite is stationary. The speed of a sprite is in direct linear proportion to the absolute value of the specified velocity.

A positive vertical-velocity causes the sprite to move toward the bottom of the screen; a negative vertical-velocity causes the sprite to move toward the top of the screen.

A positive-horizontal-velocity causes the sprite to move to the right; a negative horizontal-velocity causes the sprite to move to the left.

If neither the vertical- nor horizontal-velocity are zero, the sprite moves at an angle in a direction and at a speed determined by the velocity values.

When a moving sprite reaches an edge of the screen, it disappears. The sprite reappears in the corresponding position at the opposite edge of the screen.

Program

The following program illustrates a use of the MOTION subprogram.

```
100 CALL CLEAR
110 CALL SPRITE(#1,33,5,92,124)
120 FOR XVEL=-16 TO 16 STEP 2
130 FOR YVEL=-16 TO 16 STEP2
140 DISPLAY AT(12,11):XVEL;YVEL
150 CALL MOTION(#1,YVEL,XVEL)
160 NEXT YVEL
170 NEXT XVEL
```
Line 110 creates a sprite.
Line 120 and 130 set values for the motion of the sprite.
Line 150 sets the sprite in motion.
Lines 160 and 170 complete the loops that set the values for the motion of the sprite.