

## 15. DISPLAY LIST INTERRUPTS

ATARI computers have a nice feature called display list interrupts. I know of no other moderately priced personal computer that has anything like it. Using these interrupts, you can modify the display at the start of one or more screen lines. For example, at a given line you can change the value of a color register or the horizontal position of a player or switch to an alternate character set. Something this good shouldn't go to waste, and so Advan BASIC has two special commands designed to take advantage of these display list interrupts.

### SETINT@

The format of a SETINT@ command is

SETINT@ integerexpress, integerexpress, integerexpress, integerexpress

The first integerexpression gives an identifying number (0 to 7) to the interrupt, so that you can refer to it. The second integerexpression specifies the display list line on which the interrupt is to occur. The third integerexpression specifies the location of what you would like to change and the fourth integerexpression gives the new value for this location. Table 15-1 lists some locations you might want to change at an interrupt.

TABLE 15-1

Memory Location	Function of Location
53266	color register of player missile 0*
53267	1
53268	2
53269	3
53270	color register (play field) 0
53271	1
53272	2
53273	3
53274	color register (background) 4
53248	horizontal position of player 0
53249	1
53250	2
53251	3
53252	horizontal position of missile 0
53253	1
53254	2
53255	3
54281	location of alternate character set**

\*color number times 16+luminance is stored here

\*\* must be a multiple of 1024; i.e.,  $1024 \times 30 = 30720$ . The value stored at 54281 should be the alternate character set address divided by 256. See Appendix D for a memory map and possible locations for an alternate character set.