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If the first byte is hex FF or decimal 255, the next two bytes indicate an address in the other memory space. (That means one block points to another block but in another type of memory.) These allow switching sound lists from GROM/GRAM to VDP or VDP to GRAM/GROM. By making this the beginning of the entire table, the sound sequence can be made to repeat indefinitely.

The type 0 indicates sound lists in GROM or GRAM and type 1 indicates sound lists in VDP.

Executing a sound list while table-driven sound control is already in progress (from a previous sound list) causes the old sound control to be totally supplanted by the new sound instruction. (That means any sound chip command will override old sound chip commands).

The SGC has 3 tone (square wave) generators - 0, 1, and 2 all of which can be working simultaneously or in combination. The frequency (pitch) and attenuation (volume) of each generator can be independently controlled. In addition, there is a noise generator which can output white or periodic noise. For more information on controlling the SGC, see the TSM9919 SGC specification.

ATTENUATION CONTROL (for generators 0, 1, 2 or 3)

One byte must be transmitted to the SGC:

Binary      1-REG#-1-Attenuation

REG# = register number (0,1,2,3)

Attenuation = Attenuation/2

(e.g. A=0000 0 db = highest volume;  
A=1000 16 db = medium volume;  
A=1111 30 db = off. )

EXAMPLE: 1 10 1 0000 : turn on gen. #2 highest volume.  
          1 01 1 0100 : turn on gen. #1 medium high volume.  
          1 11 1 1111 | turn off gen. #3 (noise generator).