

# Complete text system

Figure 4.1 is a block diagram of a complete system. The unshaded blocks have already been described in Part 3 and are concerned with *reading* codewords from the RAM at the correct time to form the text on the screen.

The shaded blocks are required so that codewords may be *written* into the RAM during the field flyback period when the RAM is not being read. During this period, a signal called the Data Entry Window (DEW) is generated.

During the text display period, the eleven lines of the read address generator are connected to the RAM.

During field flyback the DEW signal operates S1 and the eleven write address lines are connected to the RAM.

The source of codewords will also supply a Write OK (WOK) signal whenever codewords are available to be written into the RAM.

Thus, when DEW and Write OK are high, g5 output is low and the read/write terminal of the RAM is low, putting the RAM in the write mode. Codewords can now be written into the RAM.

When the DEW signal goes low, g5 output goes high. The RAM returns to the read mode and S1 connects the read address lines to the RAM.

Various sources of codewords and how they are connected to the system can now be described.

Fig. 4.1

