3 Entering Level II Code into RAM

Either the RCU or an external computer attached to the player's RS-232C port may be used to enter simple or complex Level II programs into the player's memory. Complete Level II applications (usually short) are sometimes entered with the RCU and retained in the LD-V8000's memory by it's 5-year battery. However, the RCU is most often used for interactive input, examining variables, or patching and examining code during the testing of larger programs. These are usually written and edited on an external computer, compiled with a Level II computer utility, and downloaded into the player for thorough testing. This procedure is highly reliable and is strongly recommended. **Section 3.1** and **Section 3.2** of this chapter explain both ways of entering Level II codes into the player's memory.

Sometimes, a Level II simulator utility program is used for testing, instead of downloading code into a player. Since the best simulator may not exactly duplicate a particular model of videodisc player, it is best to test applications on the player actually intended for use, including a final check using a proof disc. No application should be considered ready for mass production until a proof disc has been extensively tested and approved.

Section 3.3 of this chapter describes how Level II programs are encoded in the Audio Channel 2 of a Pioneer videodisc.

Caution: This manual is intended to be a *reference guide*, not an instructional manual in the fundamentals of computer programming. Actual programming procedures and methods are not explained anywhere in this manual. If you decide to create your own Level II videodisc application and you are not familiar with computer programming, we strongly suggest you become familiar with programming concepts. This will help you to make best use of the considerable power of the Level II videodisc programming language. In any case, it is highly recommended that you contract an experienced Level II programmer before you begin the project. Pioneer Communications of America, MSD, Engineering/ Technical Support can answer questions or refer you.