

Appendix E

Conversion Tables

This appendix briefly discusses bits and bytes and what they can represent. It also contains conversion tables for hexadecimal to decimal and negative decimal, for low-resolution display dot patterns, display color values, and a number of eight-bit codes.

These tables are intended for convenient reference. This appendix is not intended as a tutorial for the materials discussed. The brief section introductions are for orientation only.

Bits and bytes

This section discusses the relationships between bit values and their position within a byte. The following are some rules of thumb regarding the 65C02 and 6502:

- A **bit** is a binary digit; it can be either a 0 or a 1.
- A bit can be used to represent any two-way choice. Some choices that a bit can represent in the Apple IIe are listed in Table E-1.

Table E-1
What a bit can represent

Context	Representing	0 =	1 =
Binary number	Place value	0	1 x that power of 2
Logic	Condition	False	True
Any switch	Position	Off	On
Any switch	Position	Clear*	Set
Serial transfer	Beginning	Start	Carrier (no information yet)