



EPROM PAC™
Instruction Sheet

The Exidy EPROM PAC is a special ROM PAC which allows you to create ROM resident software for the Sorcerer computer, using your own PROMs. The EPROM PAC comes jumpered for use with type 2716 EPROMs, for a total of 8K bytes storage. By simply changing jumpers, you can alter the EPROM PAC to accept many other common bipolar and MOS PROMs. You can use any PROM that has these pinouts:

pin	signal	pin	signal
1	A7	24	Vcc
2	A6	23	A8
3	A5	22	A9
4	A4	21	*
5	A3	20	*
6	A2	19	*
7	A1	18	*
8	A0	17	D7
9	D0	16	D6
10	D1	15	D5
11	D2	14	D4
12	GND	13	D3

* Pins 18, 19, 20, and 21 must be some combination of chip selects, +5V, -5V, +12V, or GND.

There are seven sets of jumpers which configure the EPROM PAC for your choice of PROMs. Jumper sets one through four select the enable signals and the Vdd and Vss signals for the PROMs. Jumper sets five through seven determine the size of the PROMs. The jumpers and their corresponding pinouts are shown in the schematic.

If your program is smaller than the EPROM PAC's capacity, you can reduce the space it uses in the memory map simply by not connecting the chip select lines (jumper location 5) for unused PROM sockets.

There are some software considerations to using the EPROM PAC. The Monitor allows your program two entry points: a COLD start, (which re-initializes all variables), and

a WARM start (which preserves any variables you choose). During a restart from the Monitor, or a reset, Sorcerer checks the top six bytes of the ROM PAC to find the proper starting address; it will enter your program at DFFAH for a WARM start, and at DFFDH for a COLD start.

If you want the Sorcerer to jump directly to your program, you must assemble it with these instructions:

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ADDR  OP CODE      INSTR  OPERAND
DFFA  C3 YY XX     JP      WARM
DFFD  C3 VV ZZ     JP      COLD

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Here, XX and YY are the high order and low order bytes (respectively) of your WARM start address, and ZZ and VV are the high order and low order bytes (respectively) of your COLD start address. If the Sorcerer does not see a C3 at either location DFFAH or DFFDH, it assumes that no ROM PAC is installed, and jumps directly to the Power-On Monitor.

Before entering a ROM PAC, Sorcerer clears the screen and repositions the cursor to the upper left corner (home position); it also stores the Monitor stack addresses, for your program's reference. On entering your program, the IY register contains the top of stack address, while F000H and F001H contain the top of RAM address.