

Short manual of microprocessor system "Prompt 80"

1. Hardware.

1.1. Microprocessor:	Intel 8080.
1.2. User accessible registers:	A, B, C, D, E, F, H, L, PC, SP.
1.3. Random access memory:	3C02...3F90.
1.4. Read only memory:	0000...0BFF – system monitor, 4000...FFFF – unused.

2. Power on.

After switching on (power on switch on the rear panel) the microprocessor system register display must indicate numbers **1234FFAA** and instruction display must be blank or else press "**SYS RST**" key.

Notes:

- Microprocessor system can be switched on once again only after 10 seconds following the switch off at the earliest.
- If you make a mistake, you see on the right display an "**ERROR**" message.

3. Control.

3.1. Examine or modify register:

**"EXAMINE / MODIFY REGISTER "R" "NEXT" [D1 D2] ["NEXT" [D1 D2]] ...
"EXECUTE / END"**

Where **R** – register number; **D1, D2** – hexadecimal numbers which form the data byte written in register.

3.2. Display or modify memory:

**"DISPLAY / MODEFY MEMORY "A1 A2 A3 A4" "NEXT" [D1 D2] ["NEXT" [D1 D2]] ...
"EXECUTE / END"**

Where **A1, A2, A3, A4** – hexadecimal numbers which form the address of memory cell; **D1, D2** – hexadecimal numbers which form the data byte written in memory cell.

3.3. Program execution:

To execute the program use commands "**SINGLE STEP**" or "**GO**". To stop the program use command "**RST6**" (hex code F7).

3.3.1. Program executing in step mode:

In program counter PC enter the initial address of program. Pressing key "**SINGLE STEP**" one instruction will be executed.

3.3.2. Program execution from beginning to the end:

"GO" INITIAL ADR "NEXT" INTERRUPT ADR "EXECUTE / END"

Note: If command "**RST6**" entered at the end of the program, not necessary to indicate the interrupt address.

3.4. Data array relocation:

"5" ADR1 "NEXT" ADR2 "NEXT" ADR3 "EXECUTE / END"

Where **ADR1, ADR2** – initial and final address of data array; **ADR3** – destination address of relocated data array.