TK Chess Program for the standard KIM-1

Theo Kortekaas, a member of the Dutch KIM User Club, published in the club magazine the KIM Kenner, Issue 11 and 20, a chess program for the KIM-1.
The standard KIM1 without any extensions!

The design criteria of this program are:

- Must run on a standard KIM-1 with only 1K memory and an audio cassette recorder.
- The program must be able to generate all legal chess moves, including castling, capture in passing of pawns.
- Accept only legal moves by the opponent.

Instructions

The program comes as two audio files on cassette.

Wave files to load

TKCH1.WAV first part 0000-13FF

TKCH1.WAV second 1780-

- Start the KIM-1 in LED/Keypad mode

- Change $00F1 to 00 (CLD)

- Change 17F9 to 00 (ID= 00 load any file)

- load the first wave file

- when finished and no error
  0000 4C Press Go within and load the second wave file

- when finished and no error
  0000 EA Press Go

 The display will now show C0dE 00 (Black)

If the computer plays White, the calculating of the move will start after pressing GO.

The display goes dim, but will flash position 1 often.

Calculating a move may take 3 -6 minutes.

When finished the display will show the move:

From field - To field in normal chess notation like E2 E4

Fields G1 to G8 are shown as 01 to 08

Fields H1 to H8 as 11 to 18

Capture by move and castling are also shown this way.

Promotion of a pawn is shown on the right positions of the display:

- 83 white paard
- 84 white tower
- 85 white knight
- 86 white queen

For black the '8' is replaced with 'C'

When stale or mate COdE is shown

After the computer shows a move the keypad is released by pressing RS

followed by AD and then the move.

Normal notation is used

For G use 0, for H use 1

Castling and capture by passing is entered the same way as shown by the computer.

To promote a pawn:

Press

- AD (address — selektie)

— O, 0, D, 6 (address 00 00)

— DA (data invoer) _

— code of the piece (see above))

— AD

and the move itself in the standard way.

Press ST to start the program again to calculate a move.

Illegal moves are shown as COdE FF .

Now enter a legal move

Computer plays black:

0010 84 F9

0012 4C D4 17

Binaries

TKCH1.BIN start address 0000 1024 bytes

TKCH5.bin start address 1780 98 bytes

Made with KIMTAPE5.COM, a DOS (use VDOS on modern Windows) to convert WAVE file to binary.