#### GRANDMASTER

by

#### FRITZ SCHAEFER

COPYRIGHT 1983, KINGSOFT Licensed by Audiogenic Ltd., England

CONGRATULATIONS on your excellent choice of GRAND MASTER from United Microware Industries, Inc. You are now the owner of what is perhaps the world's strongest chess program for home computers. Whether you're an experienced player or a newcomer to the world of chess, GRAND MASTER will provide you with countless hours of interest and enjoyment, both as an opponent and as an instructor. It will help to increase your understanding of the game and therefore bring you greater pleasure and satisfaction. This chess program has many features which have been specially incorporated to make GRAND MASTER easy and flexible to use. We wish you many hours of fun and excitement and hope that you derive as much pleasure in using this game as we did making it available to you. IT'S ALL FOR YOU FOR THE FUN OF VIC!

#### BEFORE YOU DO ANYTHING

The first thing we suggest is that you read through these instructions carefully. This way you'll have a better understanding of just how the game is played, and you'll be able to begin using your GRAND MASTER program with greater ease in less time. This booklet was designed to take you through the steps of using GRAND MASTER. If you are new to the game of chess, first look at pages 2-4 where we explain the rules of this absorbing game. We'll show you how to bypass the awkward learning period and get you right into the fun of playing chess. For the veteran player, we'll explain how the more sophisticated features can enable you to get the maximum entertainment from your new chess partner.

#### LOADING THE PROGRAM

To load your GRAND MASTER into your VIC 20, simply follow these steps:

a. Before switching on, be sure that you have at least an 8K RAM memory expansion pack fitted into the cartridge slot

at the rear of the VIC.

- b. Turn the VIC power ON then insert the cassette with label facing upwards. Rewind the tape if necessary.
- c. Type LOAD then press RETURN. You will then be asked to "PRESS PLAY ON TAPE". Having done this, your Grand Master program will begin as soon as the program finishes loading.

#### PLAYING THE GAME OF CHESS

FIRST A LITTLE HISTORY . . . . During the fifth century A.D., a game called "Chaturanga", made its appearance in historical records in northwestern India. "Chaturanga", as it was played then is easily recognizable, with few differences, as our modern chess. The game spread west into Persia, and from there it moved along the ancient trade routes to the shores of the Mediterranean, reaching Europe by about 1,000 A.D. The Norman Conquest brought chess with it into England and the Spanish soldiers and French explorers introduced it first into the New World of the Americas. By the 17th century, chess had developed the exact form that we now enjoy today. Some slight rule variations (Double Advance, En Passant, Queening, and Castling), however, have been added and fashions in strategy continue to change from decade to decade.

## Terms You Should Know

The following terms are commonly used when describing the game of chess. If you familiarize yourself with these terms now, it will help you to better understand the upcoming explanation of HOW TO PLAY THE GAME OF CHESS.

RANK - A RANK is any of the rows of squares that extend across a chessboard perpendicular to the file or, in other words, side by side.

FILE - In the game of Chess a FILE refers to the rows of squares that extend across the chess board from White's side to Black's side. In other words, one behind the other in single file much like an army would march or proceed in file.

CASTLING - CASTLING is a move of the king and either rook, counting as a single move (of the King). The move is made as follows: the King is transferred, from its original square, two squares toward either rook on the same rank. Then that rook (which the King was moved

toward), is transferred over the King and placed on the square immediately adjacent to the King.

CASTLING is impossible:

a) If the King has already been moved, or

CASTLING is prevented for the time being:

- a) If the King's original square or the square which the King must cross or that which it is to occupy is attacked by an enemy piece, or
- b) If there is any piece between the King and the rook toward which the King is to be moved.

#### THE GAME

Chess is the classic game of manuver and control. It is played on an  $8\times8$  board between two players (with GRAND MASTER, your computer is one of the players), each with an initial army of 16 pieces. These 16 pieces are as follows:

A King	Two Bishops
A Queen	Two Knights
Two Rooks	Eight Pawns

The two players must alternate in making one move at a time. The player with the white pieces begins the game. A player is said to "have the move" when it is his turn to play.

With the exception of castling, a move is the transfer of a piece from one square to another square which is either vacant or occupied by an enemy piece.

No piece except the rook, when castling, and the knight may cross a square occupied by another piece.

A piece played to a square occupied by an enemy captures it as part of the same move. The captured piece must be immediately removed from the chessboard by the player making the capture.

## How The Pieces Are Moved

THE KING - Except when castling, the King moves to any adjoining square that is not attacked by an enemy piece.

THE QUEEN - The Queen moves to any square on the file, rank, or diagonals on which it stands.

THE ROOK - The rook moves to any square on the file or rank on which it stands.

THE BISHOP - The bishop moves to any square on the diagonals on which it stands.

THE KNIGHT — The knight's move is composed of two different steps. First, it makes one step of one single square along the rank or file. Second, while still moving away from the square of departure it moves one step of one single square on a diagonal.

THE PAWN - The pawn may only move forward except:

- a. When making a capture, it advances from its original square either one or two vacant squares along the file on which it is placed, and on subsequent moves it advances one vacant square along the file. When capturing, it advances one square along either of the diagonals on which it stands.
- b. A pawn attacking a square crossed by an enemy pawn which has been advanced two squares in one move from its original square may capture this enemy pawn as though the latter had been moved only one square. This capture may be made only on the move immediately following such an advance and it is known as capturing "en passant."
- c. On reaching the last rank, a pawn must be immediately exchanged, as part of the same move, for a queen, a rook, a bishop, or a knight of the same color as the pawn, at the player's choice without taking into account the other pieces still remaining on the chessboard. This exchanging of a pawn is called "promotion" and the action of the promoted piece is immediate.

## PLAYING GRAND MASTER

# Entering A Move

At the start of the game you'll see a chesboard with your (white) pieces standing on the bottom. In order to enter a move, you must first locate the square FROM which a piece is to move and then the square TO which that piece is to move.

FOR EXAMPLE: Let's say you wanted to move your PAWN from square E2 to

square E4. To enter this move, just press the keys E2E4. Then, if you're certain that this is the move you wish to make, you should press RETURN. The move will now be displayed on the screen. GRAND MASTER will respond with its own move, either immediately from its own opening library or after computing its best reply. While GRAND MASTER is computing it will display its correct thoughts. If you look to the letter P, you can see how many plys deep the analysis is. A ply is ore

move for one side. So, P3 means that GRAND MASTER has analyzed one move from itself, one move from you, and again one move from itself. You can also see the best move which GRAND MASTER has found so far in its search.

If at any time you key in and enter an illegal move, GRAND MASTER will refuse to make the move on the screen and will clear the input area. You should simply key in and enter a new, legal move.

The DEL key is used to clear the incorrect characters from the input area. Pressing the DEL key will clear the last character displayed. This will be necessary, for example, when a move or part of a move has been keyed in incorrectly. The DEL key will not erase a legal move which has been entered into the computer by means of the RETURN key. If you wish to correct a move after pressing RETURN, you must interrupt GRAND MASTER from thinking and take back one complete move. (See page 6 under SPECIAL FEATURES).

## STARTING TO PLAY

At the start of the game it is White's turn to move. If you wish to play White, enter your first move in the manner described under "HOW TO ENTER A MOVE". If you prefer to play Black, simply press the keys CTRL and number O together. GRAND MASTER will flip the board and make its first move as White. Any time you press these keys together, a new game with reversed colors will begin.

# MAKING SPECIAL MOVES

There are some speciall moves in the game of chess which you need to know how to deal with. They are CASTLING, (explained on page 2), EN PASSANT captures and pawn PROMOTIONS. (These two are explained on page 4 under How to Play to Game of Chess.)

CASTLING - This move is made simply by entering the King's move only:

Press E1G1 when you wish to castle King's side as White.

Press E1C1 when you wish to castle the Queen's side as White.

Press E8G8 when you wish to castle the King's side as Black.

Press E8C8 when you wish to castle the Queen's side as Black.

EN PASSANT - When you wish to capture en passant, simply enter the move of your capturing pawn. GRAND MASTER will automatically remove his captured pawn.

PROMOTION - When you are playing against GRAND MASTER, it will automatically promote your pawn to a Queen when it reaches the promoting square. You need not worry when GRAND MASTER promotes a pawn - it will choose whatever it thinks best!

### SPECIAL FEATURES

GRAND MASTER is packed with features that make playing the game a lot more convenient as well as fun. Here is a list of the appropriate keys.

KEY FU	NCTION CONTRACTOR OF THE PROPERTY OF THE PROPE
sc	ves screen one position right, if the reen position on your TV or monitor is f center.
sc sc	ves screen one position left, if the reen position on your TV or monitor is f center.
sc	ves screen one position down, if the reen position on your TV or monitor is f center.
sc	ves screen one position up, if the reen position on your TV or monitor is f center.
F3 Ch	ooses one of 8 foreground colors.
F5 Ch	ooses one of 16 background colors.

F7

Chooses one of 8 border colors. If you're interested in amazing color effects, type: POKE650,128 (which makes all keys repeat) before you LOAD & RUN this program. if you then press one of the function keys, a color spectacle can be seen on your screen.

F8

Selects interlace mode (required only for some TV sets). This will eliminate any fuzzy or jittery images that may appear on your TV screen.

4

This key allows you to take back the last move (two plys). Although technically this is cheating, it can be very instructive. This function always works, even when GRAND MASTER is in its opening library. If it chooses an opening variant you don't like, press this key and try again. Now, GRAND MASTER will probably play another move. This function is disabled after MATE and STALEMATE.

SHIFT KEY/?

You can use GRAND MASTER as a chess tutor, to see what it would do in your place.
When it is your turn to move, press the SHIFT KEY and? together, and GRAND MASTER will give you a hint for your next move.
If you want to play a different move, you may simply enter it in the usual way. This function is available when GRAND MASTER is playing from its opening library and during normal play. It is disabled after — and at the time GRAND MASTER is leaving its opening library.

L

GRAND MASTER has several levels of play designed to challenge players of various strengths and patience. Each time you begin a new game, the level is set to 1. To set the desired level, press L and a number from 0 - 9. The new level will be displayed on the screen by LO ... L9. GRAND MASTER's level of play may be changed whenever it is your move in the game. The levels and their average response times are as follows:

LEVEL	RESPONSE TIME	DESCRIPTION
0	HOURS/DAY	Special level for analysis or postal chess.
		76 (8 190) 1833 To 100 (8 190) 8 (190) 29 (190)
1	5 Sec.	Beginner's level or used for speed chess.
2	15 Sec.	Fast paced game.
3	35 Sec.	The whole game should last about one hour (if you move at GRAND MASTER's pace).
4	1 Min.	
5	1.5 Min.	
6	3 Min.	GRAND MASTER's tournament level, where it should make 40 moves in 2 hours.
7	5 Min.	Interesting level for those who are not challenged by levels 1 to 6.
8	30 Min.	For the patient player.
9	2 Hours	For the very patient player.
CTRL 0	Begins a new game	with reversed colors.
RUN/STOP	move it has found and force it to m The stop feature MASTER on a high	R is thinking you can see the best so far. You can stop its thinking ake that move by pressing RUN/STOP. is useful if you have set GRAND level and are now tired of waiting if you discover that you have just

# DETERMINING THE WINNER

The King is in check when the square it occupies is attacked by an enemy piece. In this case, the latter is said to be "checking the King."

Check must be averted by the move immediately following. if check cannot be averted, it is said to be "mate".

A piece blocking a check to the King of its own color can itself give check to the enemy King.

The game is drawn:

- a) When the King of the player whose turn it is to move is not in check and the player cannot make any legal move.
- b) By agreement between two players.
- c) Upon a claim by one of the players when the same position is about to appear or has appeared for the third time. This is with the same player having the move each time. The position is considered the same if pieces of the same kind and color occupy the same squares and if the possible moves of all the pieces are the same.

When a player having the move demonstrates that at least fifty (50) consecutive moves have been made by each side without the capture of any piece or the movement of any pawn.

# PLEASE NOTE "C" IN LOADING THE PROGRAM SHOULD READ:

Type in NEW press RETURN, then type in LOAD and press RETURN.