# NOVAG® AQUAMARINE RISC II 26.6 MHz

Instruction manual

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# I) GENERAL DESCRIPTIONS

Congratulations on the purchase of your NOVAG AQUAMARINE RISC II computer. You will be able to verify its surprising strength and the wide range of functions and possibilities. If you are impatient to try out your machine we suggest you read the "quick instructions" paragraph and play a few games at level 1.

Playing with the NOVAG AQUAMARINE RISC II is simple compared to other chess computers. In any case, we recommend that you read the general instructions before starting a game. In the general instructions, each section is independent of the others, so you don't have to read everything at once.

The NOVAG AQUAMARINE RISC II works with 6 alkaline batteries of 1.5V type (AA) that are not included with the machine. To insert the batteries, open the compartment on the back of the machine and insert the batteries according to the +/- signs. A fresh set of alkaline batteries provide approximately 60 hours of operation.

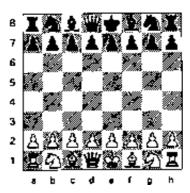
The adapter can be purchased separately from the machine with the importer's reference. Use only the adapter specified for your machine, the use of another adapter invalidates the warranty.

Please connect the adapter to the mains before plugging in the machine.

The NOVAG AQUAMARINE RISC II has C-MOS type memory that retains the last position of the board. You must make sure that the machine has batteries or that you have the adapter connected to the network, otherwise you will lose the contents of the memory.

# II) QUICK INSTRUCTIONS

1. Before you start playing, place the pieces in opening position (the white pieces on rows 1 and 2 and the black pieces on rows 7 and 8) of the chessboard.



- 2. The switch is located on the upper right side of the machine.
- 3. Press the NEW GAME key and you will hear three beeps. "00:00" will appear on the screen. You can now make your first move for White.
- 4. To set a specific game level, press the LEVEL key and then click on a square with a piece (for example square A1 corresponds to level 1, A2 to level 2, etc.). If you do not adjust the level, the machine will play at the last level it played before. (In this case, do not press the GO key mentioned below next.)

5. Once you have adjusted the game level, press the "GO" key to exit LEVEL mode. After this you can introduce White's first move. Simply press the piece you are going to move and then the square you want to move it to.

At that very moment the machine starts up and responds more or less quickly depending on the level of play or if it is in the opening book where you don't have to think.

Once the machine decides its move, a beep will be heard and some lights will come on that serve to indicate in which row and in which column is the piece of the machine that it wants to be moved. After pressing this box, the machine will mark the destination position in the same way. Consequently, your piece should be moved to this new square by pressing it as usual. White will then play, proceeding as described above.

In the event that you want to go back a move, wait until it is your turn, press the **TAKE BACK** key and undo the corresponding movement on the board following the steps indicated by the computer. In the event that a capture has occurred, the computer will indicate on the screen which piece has to be replaced (you can see the symbols of the pieces in the **VERIFY** section).

If you want to go back another movement, repeat the process by pressing the TAKE BACK key again.

# III) GAME FEATURES

#### a) making a move

Simply press the piece you are going to move and then the square you want to move it to.

To castling, move the king first, skipping the square where the rook will remain. Then move the tower also by pressing. When you promote a pawn, you will have to indicate the piece you wish to promote by pressing one of the keys with the appropriate symbol. To cancel a wrong move before you finish entering it, press the **CLEAR** key.

### b) eating a piece

If the computer indicates a move to a square that is occupied by an opponent's piece, it means that a capture will be made. Press the piece that is going to capture, remove the piece to be eaten without pressing, and leave the eating piece in its place by pressing the square. In case of eating on the go, do not forget to remove the eaten pawn.

#### c) Impossible and illegal movements

The NOVAG AQUAMARINE RISC II is programmed according to the international rules of chess and neither accepts nor makes illegal moves. If you try to make an illegal move, the LCD will show "**Err**" and beeps will sound. You can then make the correct move.

#### d) Castling

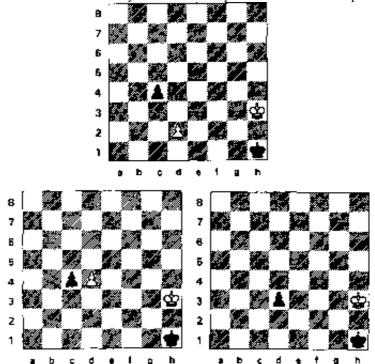
To castle, indicate only the movement of the King, which is the one that moves first by jumping one square, and then introduce the movement of the Rook always pressing.

The NOVAG AQUAMARINE RISC II accepts and performs castling in suitable positions.

Note: It is illegal to castle when the king is in check or if it passes through a square that is attacked by an opposing piece.

#### e) eat on the go

If you wish to capture en passo, you only have to indicate the square from which the pawn starts and to which it goes, as if it were a normal movement. Always remember that you must remove the captured pawn from the board.



#### f) Promotion and subpromotion

When you are going to crown a piece, the message "Pro?" will appear on the LCD.

You will choose the piece you want to crown by pressing the key with the appropriate symbol. When the computer crowns, it will show you the piece you have chosen on the screen.

If you didn't have time to see it, you can use the VERIFY key to find out the selected part.

#### g) Boards

The NOVAG AQUAMARINE RISC II announces a position that corresponds to tables with the LED marked STALE.

#### h) Check and Checkmate

If the computer checks it, it will light the CHECK LED. In the event that it was checkmate, the MATE LED will also light up.

If you check the computer, this will not be specified in any way.

The AQUAMARINE RISC II can announce dunks in 8 moves.

# IV) SPECIAL FEATURES

# 1) NEW GAME key

By pressing the NEW GAME key, a new game will start. The previous game will be canceled and in the computer's memory all the pieces will now be in the starting position.

Press the NEW GAME key each time you want to start a new game. The level of play will remain unchanged.

# 2) LEVEL key

Your NOVAG AQUAMARINE RISC II has 7 game modes with 8 time controls each. To adjust the NOVAG in any of the game modes press the **LEVEL** key. Each time you press it, you will advance to the next group (and you will see on the LCD the symbols: tr = tournament level, At = set average time level, Sd = starting level at..., Fd = fixed depth level, An = level of analysis, EA = level of new player, in = level of mate in ...). Once the game modality has been decided, to program the level you must press the corresponding box with the help of a piece. (Mode and level can be chosen directly by pressing the corresponding box: The column corresponds to the category and the row to the level.)

Example: If you want to adjust the AT 4 level, press the **LEVEL** key repeatedly until the LCD shows "At 1", and press box B4 (to enter  $n^{\circ}$  4). On the LCD you will see "At 4" indicating the level that is selected.

A faster alternative is to press the level key once and then the B4 box.

To indicate that the level selection operation has been completed, you must press the GO key.

You can change or just check the game level at any time during the game as long as it is your turn to play.

Note: When you turn off the computer, when you turn it back on the game level will have been maintained invariable.

AS A GENERAL RULE, THE OLDER THE MACHINE HAS, THE BETTER IT WILL PLAY.

8	TR8	AT8	SD8	FD8	AN8	EA8	IN8	
7	TR7	AT7	SD7	FD7	AN7	EA7	IN7	
6	TR6	AT6	SD6	FD6	AN6	Al6	IN6	
5	TR5	AT5	SD5	FD5	AN5	AI5	IN5	
4	TR4	AT4	SD4	FD4	AN4	Al4	IN4	
3	TR3	AT3	SD3	FD3	AN3	AI3	IN3	
2	TR2	AT2	SD2	FD2	AN2	Al2	IN2	
1	TR1	AT1	SD1	FD1	AN1	Al1	IN1	
	Α	В.	C.	D.	E.	F.	G.	Н.

# **Description of the levels:**

#### • Tournament Level Trl-Tr8:

For games with tournament time. All movements are predetermined at a fixed time (eg 40 movements in 120 minutes).

Level 8 is the strongest. If you exceed the determined time, you lose the game. This modality is the most natural of the game, since it is the form normally used by chess players. If you consider yourself a good player it is advised that you try level 1 or 2 at first.

#### • Average Time Level Established Atl-At8:

The NOVAG AQUAMARINE RISC II will make thoughtful plays with an average time equal to the one selected. This modality is used to give a determined time to the machine to solve a problem.

#### • Starting Level In... Sdl-Sd8:

The machine has to finish the game in a previously established time. If this time is exceeded, the game is lost. The clock counts down and will alert you with three beeps that the time has exceeded. In any case, if you want to continue the game, you can do it out of time, but in the judgment of the machine you will have already lost. The computer clock will continue to run. This is the only level in which the times appear on the screens at the beginning of the game. (In the others it appears 00 00 00 00 ).

#### • Level Dc Depth Given Fdl-Fd8:

Important to prevent the machine from analyzing more than desired if it is intended to be weakened on purpose: In this mode children can play using the first levels, such as FD1, FD2, etc. The computer will only search to a certain depth.

#### • Analysis Level Anl-An8:

This category is the continuation of the previous one and in AN1 it deepens 9 half-plays. In AN8 he deepens 16 half-plays. As in this last level, in most of the positions, it would take an excessive amount of time, this combination can be used as an infinite level: in this case, the play will be observed with the screen while the machine thinks and it can be made to play by pressing the **GO** key.

#### • Eal-Ea8 New Player Level:

In this category the NOVAG AQUAMARINE RISC II will not think during the opponent's time. The computer will think only a half move except when it comes to considering a capture attacked and defended by many pieces. In this case, he will limit his reasoning to a specific number of half moves (a half move is a move of one color, for example E2-E4,E7-E\$ would be 2 half moves, one by White and one by White). black). All new player levels are very quick to respond. If these levels are too difficult for a beginner, you can use the ones listed above; SD1, SD2 series, etc.

IF YOU HAVE DIFFICULTIES BEATING THE MACHINE, IT IS RECOMMENDED TO TRY AS SOON AS POSSIBLE AT LEVEL SD1 OR TR1 IN COMBINATION WITH EASY AND RANDOM 4 MODES. In this way the machine is weakened in a more "natural" way than in the SDI, SD2, etc. levels

**Note**: All levels can be changed with **EASY** (section 19). In this mode the computer does not think while you do. In this way, another series of game levels lower than the previous ones are achieved.

# LEVEL TABLE

Le	vel		Description	Half time
Tr	1	(1)	40 moves in	5 minutes / 7.5 s
	2	(2)	40 moves in	15 minutes / 22.5 s
	3	(3)	40 moves in	30 minutes / 45 s
	4	(4)	40 moves in	60 minutes / 1 min 30s
	5	( <del>5</del> )	40 moves in	90 minutes / 2 min 15s
	6	(6)	40 moves in	100 minutes / 2 min 30s
	7	(7)	40 moves in	120 minutes / 3 min
	8	(8)	40 moves in	150 minutes / 3 min 45s
At	1	(9)	2 seconds average	per move
	2	(10)	5 seconds average	per move
	3	(11)	10 seconds average	per move
	4	(12)	15 seconds average	per move
	5	(13)	30 seconds average	per move
	6	(14)	1 minute average	per move
	7	(15)	2 minute average	per move
	8	(16)	3 minute average	per move
Sd	1	(17)	The whole game in	3 minutes
	2	(18)	The whole game in	5 minutes
	3	(19)	The whole game in	10 minutes
	4	(20)	The whole game in	15 minutes
	5	(21)	The whole game in	30 minutes
	6	(22)	The whole game in	60 minutes
	7	(23)	The whole game in	90 minutes
		(24)	The whole game in	120 minutes
	8	(24)	The whole game in	120 minutes
Fd	1	(25)	Search only	1 half moves
	2	(26)	Search only	2 half moves
	3	(27)	Search only	3 half moves
	4	(28)	Search only	4 half moves
	5	(29)	Search only	5 half moves
	6	(30)	Search only	6 half moves
	7	(31)	Search only	7 half moves
	8	(32)	Search only	8 half moves
An	1	(33)	Search only	9 half moves
	2	(34)	Search only	10 half moves
	3	(35)	Search only	11 half moves
	4	(36)	Search only	12 half moves
	5	(37)	Search only	13 half moves
	6	(38)	Search only	14 half moves
	7	(39)	Search only	15 half moves
	8	(40)	Search only	16 half moves
Ea	1	(41)	half moves	calculate 2 captures
	2	(42)	half moves	calculate 3 captures
	$\frac{2}{3}$	(43)	half moves	calculate 4 captures
	4	(44)	half moves	calculate 5 captures
	5	(45)	half moves	calculate 6 captures
	6	(46)	half moves	calculate 7 captures
	7	(47)	half moves	calculate 8 captures
	8	(48)	half moves	calculate 9 captures
In	1	G1	Matte in 1	
	2	G2	Matte in 2	
	3	G3	Matte in 3	
	4	G4	Matte in 4	
	5	G5	Matte in 5	
		G6	Matte in 6	
	6 7	G6 G7	Matte in 6 Matte in 7	
		G8	Matte in 8	
	8			

#### 3) Mate's Resolution function

The NOVAG AQUAMARINE RISC II can solve most mating problems in 8 moves, even those that require castling, en passant capture, or promoting pawns. Press the **NEW GAME** key. Before starting the search for the mate, it is advisable that you use the **VERIFY** key to check the position and make sure that the side that is going to make the mate is the same one indicated on the LCD. If not, press the **COLOR** key to change sides.

To select the level of the checkmate in ... press the **LEVEL** key, then select the number of moves for the checkmate with the boxes G1 to G8.

Press GO once to exit the function, and Go again to have the computer begin the search.

If the computer has not found a solution, the message "no nE" will appear on the LCD. In this case what happens is that the solution DOES NOT EXIST and the problem is confused or the mate is done with more moves. (You can try repeating the problem by increasing the level).

#### screens

While the NOVAG AQUAMARINE RISC II is searching, it will show you on the LCD the plays it is considering, and a series of very useful information that will rotate as follows:

- a) Time consumed.
- b) First move considered in the main line.
- c) Second movement of the main line.
- d) Third movement of the main line.
- e) Position evaluation, eg 9 99 means an advantage of 9.99 pawn units, if the sign appears, it means that the machine considers that your position is inferior.
- f) Search depth (d 6 means it is searching up to 6 half moves).
- g) Moves to be calculated (26 30 means that there are 26 moves out of the 30 possible ones still to be calculated, with the search depth indicated above).
- h) Time elapsed in this move

# 4) GO key

The GO key is used to enter a command or to exit the special functions **SET UP/ VERIFY/ SET LEVEL/ AUTOPLAY/ SOLVE MATE**.

These functions are explained in their respective paragraphs.

#### In addition, the **GO** key is used to:

- So that the NOVAG AQUAMARINE RISC II thinks the move for the side that has to move, even in REFEREE mode.
- To interrupt the calculation of the move and force it to move immediately. In this case the machine will make plays lower than the programmed level.
- To change color during the game. Wait until it is your turn to move and press the **GO** key. The computer will now think the move for this color while you play the other side from now on.
- To make the computer play against itself. This can be of special interest at a certain point during a game, each time you press the **GO** key the computer will think up the move for the color it's turn to move.
- To accept the **HINT** (see HINT).

## 5) REFERENCE key

• In this mode, you turn NOVAG AQUAMARINE RISC II into a chess referee, checking the legality of moves made on the board, the computer will not respond to yours

plays. This is very useful to make the machine play a certain opening: making the first movements, the machine is directed in the desired direction and immediately afterwards it leaves the mode with the referee, thus ensuring that the machine continues playing the line that it wants to study.

The LCD will display "rEF off\* when REFEREE mode is not engaged and "rEF on" when REFEREE mode is engaged. The first press shows you the current status of the REFEREE. A second press (within two seconds after the first press) changes the function.

#### 6) HINT key

The NOV AG AQUAMARINE RISC II can advise moves if you are not sure how to continue a game. When it is your turn to play, press the HINT key and the computer will show you what it currently considers to be the best move for the side that has to move, the move will be reflected on the LCD. You can accept the move that the machine shows you by pressing the GO key at that moment, or make your own move regardless of what the LCD shows.

IF YOU USE THE HINT-GO SYSTEM, WHENEVER YOUR MOVE MATCHES THE ONE RECOMMENDED BY THE MACHINE, YOU SHOULD MOVE YOUR PIECE <u>WITHOUT PRESSING</u>.

If you press the HINT key while the computer is thinking, it will show you on the LCD the best move calculated up to then: AT HIGH LEVELS OR WHEN PROBLEMS ARE GIVEN TO THE MACHINE IT IS VERY INTERESTING TO OBSERVE IN THIS WAY HOW THE MACHINE FOUND SUCCESSIVE PLAYS.

Press CLEAR to return to LCD rotating information. The recommended move is the best possible one calculated by the NOVAG AQUAMARINE RISC II at the game level in which it is selected.

#### 7) TRAINING key

This function is to help the new player:

Priiger step:

When it is your turn to move, press the TRAINING key and the computer will show you on the LCD the square of the first piece that can make a legal move.

If you continue to press the TRAINING key, the NOVAG AQUAMARINE RISC II will teach you all pieces with at least one legal move.

Second step:

Once you've decided on a part, press GO. If you now press the TRAINING key each press of this key will teach you the squares to which that piece can make a legal move.

Third step:

Press the Go key to accept the play that the computer is advising you.

If what you want is to do a different movement, execute it in the usual way.

If you want to go back to Step 1, press CLEAR key to clear the LCD and press TRAINING to go back to Step 1.

# 8) TAKE BACK key

The NOVAG AQUAMARINE RISC II allows you to go back up to 138 half-moves to allow you to rectify what you consider to be a bad play or poor line of play.

Wait for your turn to play. Press the TAKE BACK key and execute the movement indicated by the machine by pressing the squares: the computer will guide you to undo the moves.

In the event that a capture is produced, the machine will indicate on the screen the piece that must be returned to the board with its initial in English. Press the box when depositing it.

Note: If you select the COLOR or SET UP modes to alter the position of the pieces, all moves made in the game up to that point will be erased from the computer's memory. If there are no movements registered in the memory of the machine, the LCD will reflect the message "bE G"

## 9) TRACE FORWARD key

This key is used to advance moves after using the TAKE BACK key or the RESTORE function. Each press of TRACE FORWARD will "advance" one move in the computer's memory. When you have reached the last position registered in memory, the LCD will show the message "En d"

#### 10) COLOR key

The computer is set up so that you play white pieces and it plays black.

- •If you want to play with black pieces:
- a) Put the black pieces on rows 1 and 2.
- b) Press: NEW GAME, CHANGE COLOR and GO:
  The machine will make the opening for the white pieces.

The COLOR key can be pressed at any time during the game, switching sides, which leads to an illegal move as one side will make two moves in a row. All movements recorded up to this moment will be deleted from the computer's memory. It is recommended to press COLOR twice in succession when you want to reset the time counters to time the solution of any problem. After exiting SET UP mode, you should choose the color to move by simply pressing the COLOR key.

### 11) CLEAR/CLEAR BOARD key

This key has several uses:

- In SET UP mode clears the board of pieces.
- If there are messages on the LCD such as "Ran", "Esy" etc. you can delete them by pressing this key.
- To exit this mode press the GO key.

#### 12) VERIFY key

This key has a double function:

- a) At the first press, you will enter the VERIFY mode and the LCD will display the message "Vc r".
- b) In the second press, it will enter SET UP mode and the LCD will display "SE t" message.
- c) To exit any of these modes press the GO key.

At any time during a game or after entering a position on the board, you can check the position of your pieces:

Press the symbol key of any part and the machine will show you its current position. If more pieces of the same type, repeat the pulsations.

Press COLOR to check the other side's pieces.

You can leave this mode at any time by pressing the GO key, being able to enter your next move or have the computer play.

#### THE SYMBOLS OF THE PARTS ARE THEIR ENGLISH INITIALS:

H(K)	= King	KING
what	= Queen	QUIN
r b	= Rook	ROOK BISHOP
U	= Bishop	
n (2 ° start	= Knight	KNIGHT
P	= Pawn	PAWN

#### 13) SET UP key

This mode allows you to enter positions on your NOVAG AQUAMARINE RISC II to solve chess problems etc. In SET UP mode the computer does not check the legality of the pieces or moves and you can position them as you like. You cannot enter an illegal position anyway. Eg: a position with two white kings etc.

If you exit the SET UP mode with an illegal position, you will hear three beeps and the LCD will show "Err" You must enter the SET UP mode again to change the position.

The computer accepts and executes castling, promoting and underpromoting pawns, and en passant captures if it plays a programmed bet.

Note: All previous movements when entering the SET UP mode are erased from the memory of the computer. To enter this mode, PRESS THE SET UP/VERIFY KEY TWICE or if you are already in VERIFY mode press it just once. You will see the message "S et" on the LCD.

To exit this mode, press the GO key or switch to VERIFY mode.

#### A) Removing a piece/ Erasing the board.

- Press the SET UP key.(VERZSET)
- Click on the square where the piece you want to remove once is located.
- To clear the board or all pieces, press the CLEAR BOARD key.
- To exit this mode press the GO key or switch to VERIFY mode to check the position of the new board.

#### B) Introducing a part/Programming a position.

- Press the SET UP key if you are not already in this mode.
- To insert a piece, first make sure that the color of the piece to be inserted is correct. If it is not, press the COLOR key to change it, and insert the desired piece by pressing the key with the corresponding symbol, and then pressing the box where you want to place it.
- To move a piece from one square to another, do it normally.
- <u>To program a position. First delete all the parts from the machine's memory with the CLEAR BOARD key</u>, select the part you want to insert using the symbol keys and proceed normally.
- To exit this mode, press the GO key.

Note: After leaving the SET UP mode, if you need to make a color change, simply press the COLOR key. Now you can make the move for that color or force the machine to do it with the GO key. Pawns cannot be programmed on the eighth or first row, the message "Err" will appear on the LCD.

# 14) SOUND key

The NOVAG AQUAMARINE RISC II has 4 different types of sound which are indicated on the LCD:

a) SOUND 1 (Snd 1) : There is no sound of any kind

b) SOUND 2 (Snd 2) : There is only one acoustic signal when the computer makes its move.

c) SOUND 3 (Snd 3) : There is an acoustic signal when any key is pressed or when the NOVAG or

you make your move.

d) SOUND 4 (Snd 4) : The same as in c) and also the computer indicates with a double beep and the

LCD will mark the square that is threatened.

Press the key modality. SOUND to adjust the sound level you want. Press GO to exit this

## 15) INFO key

This key provides you with game information in a rotating display.

Sequence to follow:

- First press the INFO key and you will see the position evaluation that the machine does. On the left is SCR = followed by the evaluation in pawn units.
- If you press the INFO key a second time, the LCD will show the time elapsed in this move of the color that you have to move.
- A third press of the INFO key will show you the number of moves that have elapsed.
- A fourth press of the INFO key will show you the total elapsed time. In the case that it is played in mode of the whole game in a fixed time, a double counter appears.

Note: Use the CLEAR key to remove the INFO display. When the computer is thinking the LCD It will show all the information rotating or one of the information listed below, to return to the rotating display press CLEAR again. Each information remains for 2 seconds:

#### 16) NEXT BEST key (LEVEL+NEXT BEST)

TO ACCESS THIS FUNCTION, YOU MUST FIRST PRESS THE SET LEVEL KEY By pressing this key, the NOVAG will go back its move and make the next best move that it has evaluated, as long as it is not excessively bad. This function is only activated if at least 1 move has been made.

### 17) EASY key

The NOVAG AQUAMARINE RISC II always uses the opponent's time to think about your answer, sometimes it answers immediately (even when the move seems difficult) because it has guessed your move and has already thought of your answer. To deactivate this benefit, press the EASY key. When you are in this mode, you will see "Esy on" on the LCD and when you disconnect it, you will see "Esy off'. This key will toggle between the two modes each time you press it. Using this key doubles the levels converting them into a lower category.

#### 18) RESTORE key

This function of the NOVAG AQUAMARINE RISC II allows you to keep the position of the board at the beginning of the game. The computer can store 69 moves (138, half-moves) in its memory. If the game has started from a programmed position or more than 69 moves have been made, it will not be possible to go back to the beginning. After pressing the RESTORE key, the LCD will show the message "Beg" to indicate the beginning of the game.

Note: You can use the additional function TRACE FORWARD to replay the entire game.

THIS IS VERY USEFUL TO OBSERVE A GAME OR POSITION THAT THE MACHINE HAS PLAYED IN AUTOPLAY AT A VERY HIGH LEVEL. In this way you can observe plays of a high level without the need to wait.

#### 19) RANDOM key

Every time you turn on the computer, the game style of the machine is to choose the move with the highest value (in its internal calculations), once the opening has finished. In order to provide more variety to the games by pressing the RANDOM key the computer will randomly choose a move from a list of possible moves with a relatively similar evaluation. There are several levels of randomness (rAn 1/2/3/4). The "rAn 1" level is the least random and the one in which the machine plays the best. Only in the event that you are repeatedly studying the same variant, it may be interesting to use the RANDOM mode. It is advisable to remove the modality as soon as the machine makes a variant with respect to the previous game.

TO PURPOSELY WEAKEN THE MACHINE USE RANDOM 4 together with the EASY key.

#### 20) AUTOPLAY

The NOVAG AQUAMARINE RISC II can play against itself, this can be interesting to observe a whole game or for the computer to analyze a problem all night putting a high level without getting boring waiting.

Press LEVEL AUTOPLAY and select the option you want, the LCD shows "Aut", "dEn" if it is in autoplay or demo. The difference between the two is that in AUTOPLAY mode the computer stops when a game ends, while in DEMO mode another game starts again.

Press GO and the NOVAG AQUAMARINE RISC II will start playing against itself on the level you are on. All the movements are executed automatically by the computer and you can follow them by recording them on your board. You can interrupt the mode by pressing GO and making the last move. To review the moves it is advisable to press RESTORE followed by TRACE FORWARD.

# IX) APPENDICES

### A) Care of the NOVAG chess computer

Dust and dirt must be cleaned with a soft cloth. Do not use water or any type of chemical solvents. Any damage from these causes will invalidate the warranty.

Always store the computer in a cool, dry place (normal room temperature). Avoid exposure to heat (sun, radiators, spotlights, etc.) This could cause permanent damage to your machine, invalidating the warranty.

WARRANTY: For details refer to the warranty card.

# **B)** List of Problems

All NOVAG computers are thoroughly tested before reaching the store. In any case, if you find a fault, look at the list at the bottom or go to your usual dealer.

The computer does not work and the LCD is blank:

Check that the batteries are charged or the adapter plugged into the network. Always use ALKALINE BATTERIES.

2) The letters on the LCD are getting dimmer:

The batteries are exhausted, please change them.

3) It shows error messages constantly:

Go to VERIFY mode and check that your position is correct.

It may also be that the NOVAG AQUAMARINE RISC II is asking you about the piece to which it is going to promote a pawn.

#### C) Technical data and characteristics:

**Program Size** 32 K Byte ROM, 8 K Bit RAM, 12 K Byte Mem. Aperturas.

CPU speed 26.6 Mhz

RISC Type Processor

50 mA max, 20 mA min. Consumed potence

6 X 1.5V AA alkaline Specific (9v DC Range 250ma) Battery Type

Adapter Type More than 13,000 half moves Opening Book 56 + 24 easy nerf + 8 save-mate

Game Levels Save the game when you turn off the machine and have CMOS memory

For new players

batteries. TAKE BACK/ functions 138 half moves

TRACE FORWARD

Matte Resolution Up to matting in 8 moves

ELO (USCF) 2241 Full information LCD

Search for best movement

TRAINING and HINT functions

REFEREE and

**AUTOPLAY mode** 

234 x 284 x 27 mm Dimensions

integrated chess clock SENSORY BOARD to make a move

SETUP and VERIFY

**Functions** 

Announce until mate in 8

Shows the search depth

learning function

**RANDOM** function

**RESTORE** function

Sample Evaluation

ALL THESE DATA MAY BE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

#### D) **Chess Rules**

#### I. GENERAL INFORMATION

The two opponents play alternately. White always start.

- With the exception of castling, a move consists of transferring a piece from one square to another that is empty or occupied by an enemy piece.
- The only piece that can jump over others is the knight. All the others must have a free path in their movements.
- When a piece moves to a square occupied by another enemy, a capture occurs, so the latter will be withdrawn, leaving the first in its place.
- If, as a consequence of a certain movement, the king is attacked, in such a way that it could be captured in the next move, then the king is said to be in check. Then there are only the following possibilities:

Move the king to an unattacked square.

Block the path that connects the enemy piece with the king.

Capture the piece that is attacking the king.

If none of these alternatives are possible then the king is in a checkmated position and the game is lost.

#### II INDIVIDUAL MOVEMENTS

Except for castling, the king can move a single step in any direction. But the destination square cannot be attacked by the enemy pieces.

Castling is the only move in which two pieces move:

First the king moves by jumping one square to the right or left.

Then the rook moves jumping over the king and leaving it in the square that the king jumped before.

#### Castling can only be done if the following conditions are met.

There is no piece between the king and the rook.

- None of these empty squares are attacked by enemy pieces.
- The king is not in check.
- Neither the king nor the rook have moved since the game began.

The rook moves vertically or horizontally in all directions and jumping over the squares you want if they are empty.

It moves similar to the rook but diagonally.

You can make the moves of the rook or the bishop as you wish.

It moves making "L" shapes in any direction. It must skip any square that is around it and stay right on the following ones observing the following condition: if the square of origin was black it must go to white and vice versa.

The squares around the original position can be occupied by other pieces since the knight is the only piece that can jump over it.

#### PAWN

This is the only piece that can only move forward and that when it eats it does so differently from its movement. In effect, he eats diagonally, moving a single square forward and to the right or left.

When you first move, you can skip one square but after that you only move one square at a time. AJ Hegar in the end the pawn becomes any other piece the player wants except another king.

When a pawn has advanced three squares from its original position, if a second pawn from the opposite side advances two squares, passing through the square attacked by the first pawn, the latter can capture the second and for all purposes it acts as if the second pawn had moved, moved a single position staying attacked by the first. This operation is called eating a! step.

# III. TIPS AND TRICKS

- The value of the pieces depends on the position but in general it is considered that if the pawn is worth 1, then the knight and the bishop are worth 3, the rook 5, and the queen 9.
- Try to control the center of the board and remove the pieces as soon as possible.
- Castle as soon as possible.
- Don't be discouraged by the contrary.

This game has been manufactured with the technology and high safety standard of Novag Industries Ltd. It tries to minimize non-recyclable materials and complies with the European Standard, which is guaranteed by the importer, whose name appears on the attached guarantee letter. . Do not leave inedible pieces within the reach of children under 36 months.

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