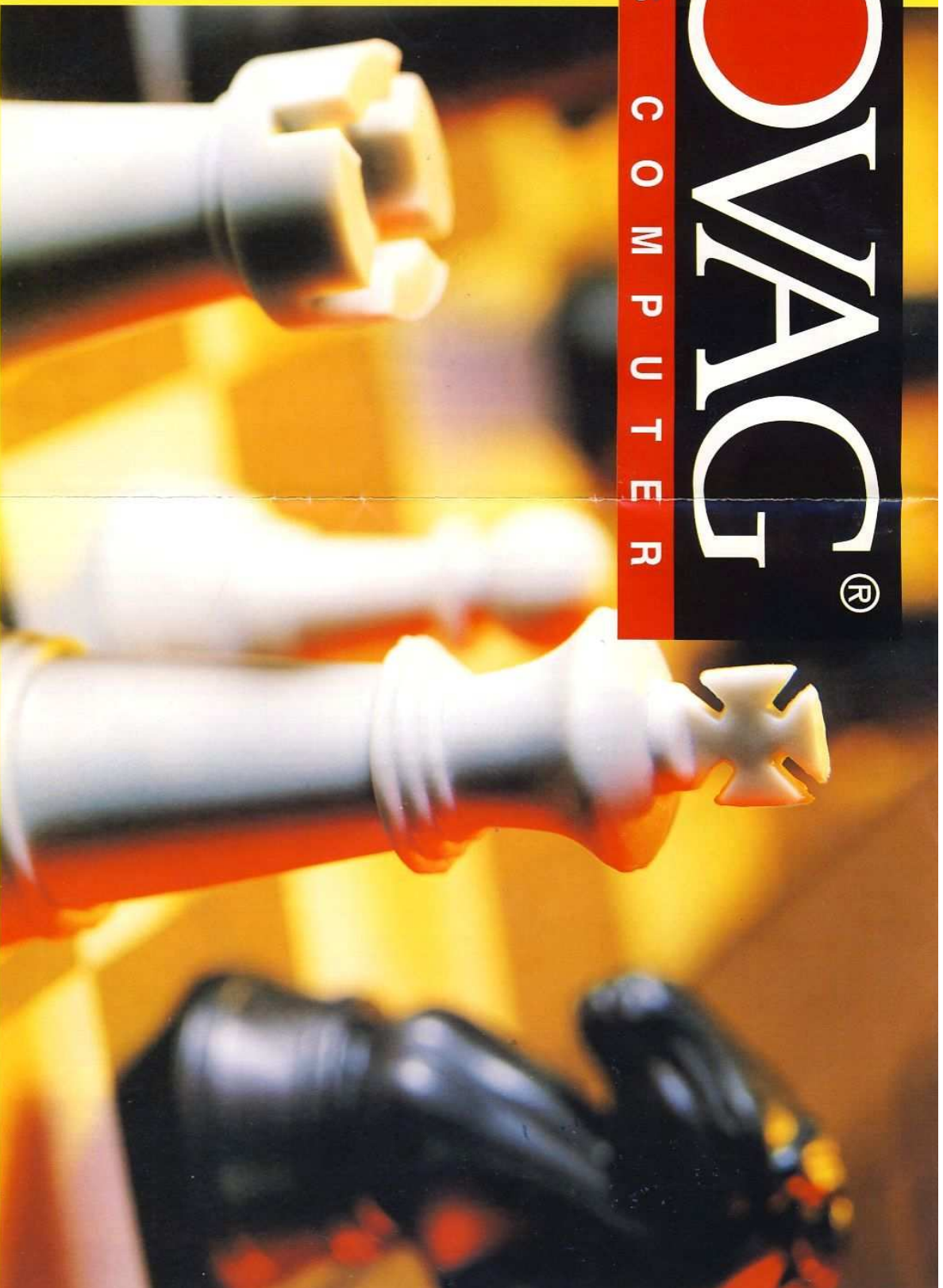# NOVAG®

CHESS COMPUTER

1996

# TRAVEL SET

## AMETHYST

ART.NO. 9405

**For beginners to experienced players**
**Est. strength: 1750 USCF**

• Neat peg sensory chess computer. The perfect travelling companion!
• 63 levels, 4K program
• 32 half-move take back
• Handy and easy-to-read LCD shows both yours and the computer's moves
• Fully portable, with piece storage compartment and clip on lid
• 1,000 hours battery life from one set of 4 x AAA cells (not supplied).

**The Amethyst is a very neat and extremely strong pocket-sized chess computer. The 63 level program caters for complete beginners up to fully experienced players. There are many training features to improve your game and 32 half-move take back to test alternative strategies.**

## OPAL II

*new*

ART.NO. 9601

**For beginners to experienced players**
**Est. strength: 1880 USCF**

• New strong 16K program with 8MHz System clock speed
• 64 levels offer strength and versatility
• 5" x 5" fully sensory chess board
• Miniature Staunton Pattern Chessmen
• Unique and easy move indicator
• Storage draw for chessmen
• Many hours of fun from 4 x AAA cells (not supplied) or an optional 9V NOVAG mains adaptor # 8210 for long term economy.

**The Opal II is a truly portable and versatile miniature sensory chess computer with a unique rank and file move indicator system for maximum ease of use. The extensive 8500 move built-in master opening library ensures a lively and varied game.**

## JADE II

ART.NO. 9402

**Beginners to county strength**
**Official grade: 2241 USCF**

• 56 level super strong 32K Byte program on a RISC-Style processor
• Special levels and features for beginners
• Very precise peg-sensor board
• Twin information LCD shows intended move and position evaluation, clock time, move count, problem solving and main continuation
• Pocket size and fully portable
  One set of 4 x AAA cells (not supplied) for great chess on-the-move or an optional 9V NOVAG mains adaptor #8210 for even greater long term economy at home.

**The Jade II is an extremely elegant compact pocket size portable chess computer with 56 levels, from beginner to county strength. It has a vast array of features including 69 move take back, referee, 4 levels of random, easy mode and game recall and replay.**

## SAPPHIRE

ART.NO. 9304

**Beginner to Master strength**
**Official grade: 2383 USCF**

• Probably the World's strongest portable chess computer
• Supplied with high quality folding magnetic chess board and elegant leatherette carrying case
• Unlimited levels and independent level setting for Black/White
• 26.6MHz RISC-style processor with over 300 K memory including Hash Tables
• Vast array of play, information and training features
• Storage of up to 64 games
• 200 move take back
• 36,000 position opening book plus 3,000 move user programmable book
• Special 'sleep' mode for full portability
• Connection to Novag Super System and UNIVERSAL Chessboard
• Runs from 4 x AAA cells or special NOVAG mains adaptor #8210 (not supplied) to local power standards.

**The Sapphire offers Master strength chess from an ultra compact truly portable chess computer. Moves are entered on a simple keyboard. The list of features is almost endless and includes: game analysis, complete game recall and replay, handicapping. It even learns from its mistakes!**

# TABLE TOP SET

## TOURMALINE

**ART.NO. 9407**

**For beginners to experienced players**
**Est. strength: 1750 USCF**

- Keyboard entry advanced table-top chess computer
- 63 levels, 4K pogram
- 32 half-move take back
- Ingenious folding design with auto power off
- HINT & TRAINING features
- Simple operation and easy to learn - an ideal 'first' chess computer
- 1,000 hours battery life from one set of 4 x AAA cells (not supplied).

The Tourmaline has a neat magnetic chess board which cleverly unfolds to reveal a strong 63 level chess computer in a swivel-out draw complete with simple keyboard and clear move display. When the computer is stored again it automatically switches off, but remembers the current position to continue the game later!

## AQUAMARINE PREMIER

*new*

**ART.NO. 9604**

**For beginners to experienced players**
**Est. strength: 1750 USCF**

- 63 levels, 4K program
- Large 8" x 8" sensory chess board and easy-to-read LCD shows the moves you and the computer make
- HINT & TRAINING features
- Simple operation and easy to learn - an ideal 'first' chess computer
- Many hours of fun from 6 x AA alkaline batteries (not supplied) or an optional 9V NOVAG mains adaptor #8210 for long term economy.

The Aquamarine Premier is an elegant, modern table-top sensory chess computer with a strong program and a comprehensive and varied opening book. The large sensory surface and clear LCD move display makes it a joy to play.

## AGATE

*new*

**ART.NO. 9602**

**For beginners to experienced players**
**Est. strength: 1880 USCF**

- New strong 16K program with 8MHz System clock speed
- 64 levels offer strength and versatility
- Fast response times
- Large LCD shows moves, take-back up to 25 half-moves, position verification and set-up etc.
- HINT & TRAINING features
- Many hours of fun from 6 x AA alkaline batteries (not supplied) or an optional 9V NOVAG mains adaptor #8210 for long term economy.

The Agate has a big sensory chess board with Staunton Pattern Magnetic Chessmen, a super program and integrated training system. Improve your game and learn to win - the computer makes sure you only make legal moves. An unbeatable choice and challenging opponent for all chess enthusiasts.

## ZIRCON II

**ART.NO. 9403**

**Beginner to county strength**
**Official grade: 2241 USCF**

- 56 level super strong 32K Byte program on a RISC-Style processor
- Special levels and features for beginners
- Ultra light touch sensory board, Staunton Pattern Magnetic Chessmen
- Twin information LCD shows intended move and position evaluation, clock time, move count, problem solving and main continuation
- Challenging chess from 6 x AA alkaline batteries (not supplied) or an optional 9V NOVAG mains adaptor #8210 for home use.

The Zircon II is a very strong table top chess computer with 56 levels, from beginner to county strength. It is packed with sophisticated analysis and game information features and has twin LCD displays for information and clock times.

# TABLE TOP SET

## EMERALD CLASSIC

*new*

**ART.NO. 9603**

**Beginner to Master strength
Est. grade: 2260 USCF**

- 56 level super strong 32K Byte program on a RISC-Style processor
- Special levels and features for beginners
- Classic styling, wood imitation cabinet with 9" x 9" soft-touch sensory chessboard and LED lamps showing how to move pieces
- Control keys give access to a dazzling array of features and all the electronic wizardry of a high standard chess computer
- Full information LCD shows the computer calculating, clock information for both sides, move count, position evaluation, depth search, problem solving and main continuation
- Challenging chess from 6 x 1.5V UM-2 or size "C" alkaline batteries (not supplied) or an optional 9V NOVAG mains adaptor #8210 for home use.

The Emerald Classic is one of Novag's top models. Its performance ranges among those of high-level world class players. Its outstanding strong program offers superior first play and human-like understanding of positions. Incredible value and a true challenge!

## DIAMOND

**ART.NO. 9303**

**Beginner to Master strength
Official grade: 2383 USCF**

- Novag's flag-ship table-top chess computer
- Sapphire's powerful program and features
- Vast array of play, training and analysis features
- Ultra light touch sensor board
- Staunton Pattern Chessmen
- Internal rechargeable battery for memory back up
- The ultimate chess computer!
- Uses a NOVAG mains adaptor #8210 (supplied separately).

The Diamond has 56 preset playing levels which can be adjusted to suit your needs. Its many 'helps' and 'hints' make it equally suitable for training beginners or assisting Masters with their game analysis. The Diamond has an ultra modern sensor board with 24 control keys and is mains operated. The chess computer that Masters waited for is now available and yet remains competitively priced!

# ACCESSORIES

## UNIVERSAL CHESSBOARD

*new*

**ART.NO. 9418**

**The perfect combination of luxury and advanced technology**

- Enjoy your favourite chess software on this beautiful wooden chessboard and play chess naturally instead of using a monitor and a keyboard.
- Carefully crafted wooden auto-sensory chessboard with hand carved chessmen made of rare wood
- 81 LED lamps and its auto-sensory mechanism register every move automatically
- Can be connected to any PC via paralled port (all necessary cables are included)
- It is compatible with most popular chess software programs: WChess, Genius, Fritz, Mephisto Advantage, Kasparov's Gambit and can be upgraded the minute new exciting software is available
- Special mains operation for long term economy at home (not supplied).

Connects also to all NOVAG chess computers which are furnished with a serial port. This will give the owners of the NOVAG Super VIP or NOVAG Sapphire a chance to challenge their strong travel companion at home on this elegant and luxurious wooden chessboard.

## DISTRIBUTOR AND DISKETTE

**ART.No. 9401**

With the help of the Distributor and the enclosed Diskette you can connect the following Novag chess computers - the Sapphire, Diamond, Super VIP, Scorpio, Super Forte and Super Expert via the serial port to an IBM or compatible P.C. You have the chess board displayed in colour graphics, also showing each move, the number of moves, board positions, clock times and which side to move and of course the chess computer's analysis is also shown on the screen. In addition you can store your game in the P.C. memory to be printed out whenever you wish.

## SELECT YOUR RIGHT PARTNERS FROM NOVAG'S RANGE OF CHESS COMPUTERS

| MODEL NAME | TRAVEL SET | | | | TABLE TOP SET | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | AMETHYST | OPAL II | JADE II | SAPPHIRE | TOURMALINE | AQUAMARINE PREMIER | AGATE | ZIRCON II | EMERALD CLASSIC | DIAMOND |
| Article Number | 9405 | 9601 | 9402 | 9304 | 9407 | 9604 | 9602 | 9403 | 9603 | 9303 |
| **SUITABLE FOR:** | | | | | | | | | | |
| • Beginners and occasional players | ✓ | ✓ | | | ✓ | ✓ | ✓ | | | |
| • Strong players, club players | | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ |
| • Tournament players | | | ✓ | ✓ | | | | ✓ | ✓ | ✓ |
| • Estimated ELO (USCF) | 1750 | 1880 | 2241 | 2383 | 1750 | 1750 | 1880 | 2241 | 2260 | 2383 |
| • Playing levels: | 63 | 64 | 56 | 56 | 63 | 63 | 64 | 56 | 56 | 56 |
| • Microprocessor | Single chip | Single chip | H8* | H8* | Single chip | Single chip | Single chip | H8* | H8* | H8* |
| • Program capacity (read only memory) | 4K Byte | 16K Byte | 32K Byte | 64K Byte | 4K Byte | 4K Byte | 16K Byte | 32K Byte | 32K Byte | 64K Byte |
| • Capacity random access memory (RAM) | 768 Byte | 768 Byte | 1K Byte | 128K Byte | 768 Byte | 768 Byte | 768 Byte | 1K Byte | 1K Byte | 128K Byte |
| • System clock speed | 8 MHz | 8 MHz | 26.6 MHz | 26.6 MHz | 8 MHz | 8 MHz | 8 MHz | 26.6MHz | 26.6 MHz | 26.6 MHz |
| • Making a move | Sensor-board | Sensor-board | Sensor-board | Key-board | Key-board | Sensor-board | Sensor-board | Sensor-board | Sensor-board | Sensor-board |
| • Showing a move | LCD | 16 LEDs | LCD/ LEDs | LCD | LCD | LCD | LCD/ LEDs | LCD/ LEDs | LCD/ LEDs | LCD/ LEDs |
| • Information LCD | | | ✓ | ✓ | | | | ✓ | ✓ | ✓ |
| • Intergrated chess clock | | | ✓ | ✓ | | | | ✓ | ✓ | ✓ |
| • Memory | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| • Move suggestion (Hint Key) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| • Training mode (coaching) | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| • Referee mode | | ✓ | ✓ | ✓ | | | ✓ | ✓ | ✓ | ✓ |
| • Opening book (in half-moves) | 145 | ~8500 | >13,000 | >36,000 | 145 | 145 | ~8500 | >13,000 | >13,000 | >36,000 |
| • Opening book programmable - / selectable | | | | ✓ | | | | | | ✓ |
| • Move take back (in half-moves) | 32 | 25 | 138 | 400 | 32 | 32 | 25 | 138 | 140 | 400 |
| • Verify / Set Up mode | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| • With random generator | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ |
| • Depth search (tournament level) | 6 | 12 | 18 | 28 | 6 | 6 | 12 | 18 | 18 | 28 |
| • Display of depth in half-moves | | | ✓ | ✓ | | | | ✓ | ✓ | ✓ |
| • Solves most MATE in...moves | 7 | 6 | 8 | 8 | 7 | 7 | 6 | 8 | 8 | 8 |
| • Mate announcement | | | 8 | 14 | | | | 8 | 8 | 14 |
| • Autoplay | | | ✓ | ✓ | | | | ✓ | ✓ | ✓ |
| • Shows score | | | ✓ | ✓ | | | | ✓ | ✓ | ✓ |
| • Display of game history | | | ✓ | ✓ | | | | ✓ | | ✓ |
| • Can resign | | | ✓ | ✓ | | | | ✓ | | ✓ |
| • Save game and learning feature | | | | 64 Games | | | | | | 64 Games |
| • NOVAG SUPER SYSTEM connection | | | | ✓ | | | | | | ✓ |
| • NOVAG UNIVERSAL CHESSBOARD connection | | | | ✓ | | | | | | ✓ |
| • Measurements in cm | 18.0x12.0x3.4 | 19.4x13.3x2.5 | 10.4x15.1x3.3 | 15.7x8.2x2.1 | 19.8x17.6x3.1 | 28.5x23.4x2.7 | 27.3x30x2.7 | 27.3x27.5x2.8 | 37x26.6x3.5 | 35.5x30.0x2.7 |
| • Power Supply (not included) | Battery | Bat./ Adap. | Bat./ Adap. | Bat./ Adap. | Battery | Bat./Adap. | Bat./ Adap. | Bat./ Adap | Bat./ Adap. | Adaptor |
| • Playing hours | 1,000 H | 100 H | 60 H | 30 H | 1,000 H | 1,000 H | 100 H | 75 H | 250 H | |

*RISC - Style processor   █ Available    *Data subject to change without notice.*

RISC (Reduced Instruction Set Chip) is a new technique which can considerably increase the speed of micro processors. RISC-style chips are particularly suited to chess programs and can add as much as 150 points to the strength of a computer.

# W Chess™

## BY DAVID KITTINGER
### Art. No.: 9409

David Kittinger is the author of all NOVAG chess computer programs. He has now created the WCHESS software and has won the prestigious HARVARD CUP 1994 in the United States with impressive 2895 points, the highest score for any chess program so far. The WCHESS also won the Uniform-Platform tournament in London convincingly.

This WCHESS software is now also available from NOVAG.

❖ New version is under preparation, will be available soon.

The range of Novag chess computers utilize the latest technology to bring you strong computers with a wide variety of features. With all these models to choose from which is the right computer for you? Below we present answers to some of the common questions concerning our computers to help you choose the right one:

## WHAT STRENGTH COMPUTER SHOULD I BUY?

What strength are you? Always buy a computer that is stronger than you are - there are many ways of handicapping the computer so that it does not play at its best, but there is no way of making it play better than its best! Computers can be classified in the following bands:

## BEGINNER TO EXPERIENCED:

These computers are suitable for the majority of players although a regular club player will need a stronger computer. There are two different programs in this class, one in the Tourmaline, Amethyst and Aquamarine Premier, the other in the Opal II and Agate.

**Both programs have a wide range of features which include:**

• POSITION VERIFICATION - check the current location of the pieces. • POSITION SETUP - to set up adjourned positions or chess problems. • MOVE TAKE BACK - to enable you to try out alternative strategies or correct accidental errors. • FORCED MOVE - make the computer move without waiting for it to complete its calculations. • MEMORY SAVE - the computer will save the current game when switched off. • HINT & TRAINING - two valuable training aids.

## BEGINNER TO COUNTY STRENGTH:

There are three computers in this range: the Jade II, the Zircon II and the Emerald Classic. These computers would suit either strong club players, or those who, although weak now, expect to improve rapidly. All have strong programs which encompass all the above features combined with:

56 LEVELS - divided into 7 sections: 8 tournament, 8 Blitz, 8 average time, 8 novice, 8 training, 8 analysis and 8 solve mate. • Game recall & replay. • REFEREE - you enter the moves for both sides, either when playing against another player, or to enter a specific game or opening you would like to play. • 4 LEVELS OF RANDOM - to give the program more variety. • EASY MODE - stop the computer calculating during your time allowing you to handicap the machine.

## BEGINNER TO MASTER:

There are two computers in this range: the Sapphire & Diamond. These are the strongest Novag computers and have a huge range of features. They also feature good novice levels and can therefore be used by any player from beginner upwards.

## HOW LONG DOES THE MACHINE TAKE TO RESPOND?

The original chess computers took hours to respond to each move, and some even played illegal moves! This is not the case now. With modern chess computers you decide how long the computer will take to reply - this can be hours if you so wish, (although we only recommend use of the longer levels for analysis). For normal play we recommend the faster levels, which range from around 5 seconds a move up to about 5 minutes. You may find that your only hope of beating the computer lies in making it move quickly while you take much longer!

## IS THE OPENING BOOK REALLY A BOOK?

The term 'opening book' refers to a part of the computer's program. Considerable work has gone into discovering which moves should be made at the start of the game. These 'openings' can extend reasonably far into the game (sometimes up to 16 moves). The computers have been programmed with these openings; when playing them the computers save time and can utilize this saved time later in the game. The larger the opening book the deeper the openings will go.

## HOW EASY ARE THE COMPUTERS TO USE?

The computers have been designed to be as user friendly as possible. Most functions are performed by a single key push, eg: to set the level you press the 'set level' key.

## WHAT HAPPENS IF SOMETHING GOES WRONG?

All Novag computers are guaranteed for 1 year, and all are tested before leaving our factory. In the unlikely event that there are problems contact your local dealer.

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# NOVAG

C H E S S   C O M P U T E R

®