

1991

**NOVAG<sup>®</sup>**  
For the intellectual

**Chess computer**



**"You can announce mate in 24 moves..."**



## **NOVAG<sup>®</sup> CHESS COMPUTERS**

NOVAG have been designing and manufacturing chess computers for over 13 years and have gradually built up the widest and most versatile range of chess computers in the entire world.

The brochure describes 12 models covering a wide price range and a wide range of playing strengths and analysis capabilities. The descriptions in the brochure and the features table are designed to help you to decide which model is most suitable for you.

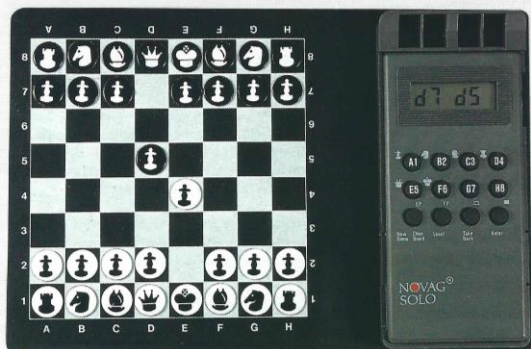
The decision can be based on a choice of portable or table-top models, playing strengths, analysis capabilities, and ability to connect to the NOVAG SUPER SYSTEM. Some models are battery operated, others offer the choice of battery or mains adaptor. All models include the ability to take-back moves to correct blunders, the ability to save interrupted games for later resumption and a choice of levels to suit playing strength of opponent and available time. The top models also include upgradeable memories so that the owner can benefit from NOVAG's ongoing programme development by changing their computer memory as new programmes become available.

### **NOVAG SUPER SYSTEM**

Some models from the NOVAG range can connect to the NOVAG SUPER SYSTEM, fully described elsewhere in this brochure, enabling the computer to communicate with a domestic TV, personal computer or external touch sensory / auto sensory board.

# **Novag Chess Computer 1991**

(photo copyright © by <http://www.schaakcomputers.nl/>)



TRAVEL SET—Art. No. 873



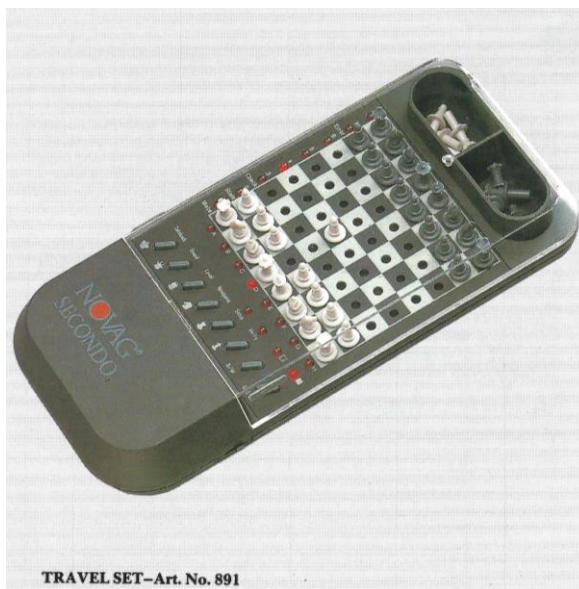
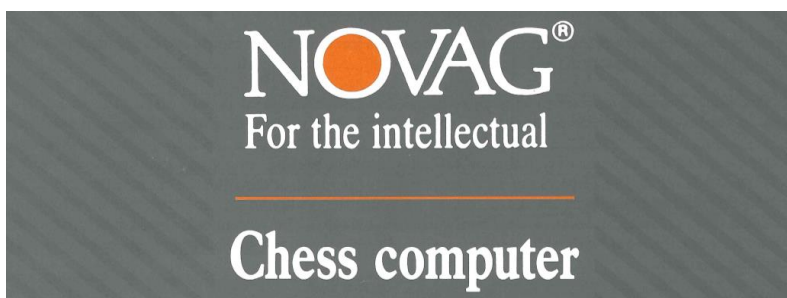
## NOVAG® SOLO

Beautifully presented, with a magnetic chess board which folds like a diary, this fascinating chess partner is so reasonably priced it is a must for everyone. The superb quality of finish and precision of operation make the SOLO an ideal gift. The chess computer, which is about the size of a pocket calculator, is removable from the magnetic board and may be turned round for playing black or used with your favourite chess board at home.

The SOLO offers 8 levels of play. At its fastest levels the SOLO responds in 1-5 seconds and even at its highest in less than one minute. For such a low cost and compact chess computer it plays a remarkably competent game.

The SOLO has a full set of features including move take-back, position verification and position set-up for problem solving. (It can solve most mate-in-2 and some mate-in-3 problems). The SOLO has a memory save so that you can resume interrupted games without wasting battery life.

One set of 4 x AAA cells (not supplied) give up to 1,000 hours of pleasure.



TRAVEL SET—Art. No. 891



## NOVAG® SECONDO

The lowest priced quality NOVAG Chess Computer featuring a full sensor board. To make your move you just press on the chess piece. You will hear a "beep". Lift the chess piece out of its square and push it on to the desired square (removing any captured piece first) and a "beep" will confirm that the SECONDO has accepted your move. The SECONDO will use lights to indicate its moves. No codes to learn. Its as simple as that!

But the chess is not simple! The SECONDO has a 4K program and a processor running at 8M.Hz to give a choice of 16 playing levels. Easy levels to encourage the beginner. Intermediate levels to guide the improver and higher levels to challenge and entertain the experienced player.

The SECONDO has a full set of features. You can take back the previous two moves for each side (to correct blunders and experiment), verify, create and modify positions and solve most mate-in-3 problems.

The handsome unit features a "latch-down" lid for travel (which also retains pieces in position), captured piece storage compartments and memory save for a complete traveller's friend.

100 hours of challenging chess from 4 x AAA cells (not supplied) and the full set of features ensure lasting pleasure.

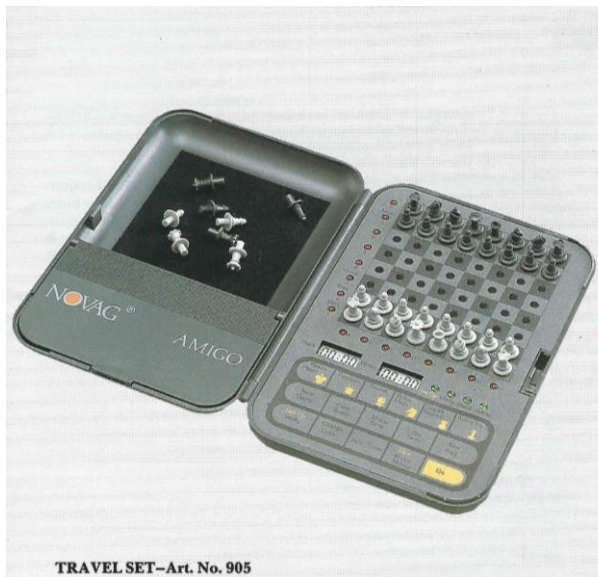
# Novag Chess Computer 1991

## Novag Solo

## Novag Secondo

(photo copyright © by <http://www.schaakcomputers.nl/>)





TRAVEL SET—Art. No. 905



## NOVAG® AMIGO

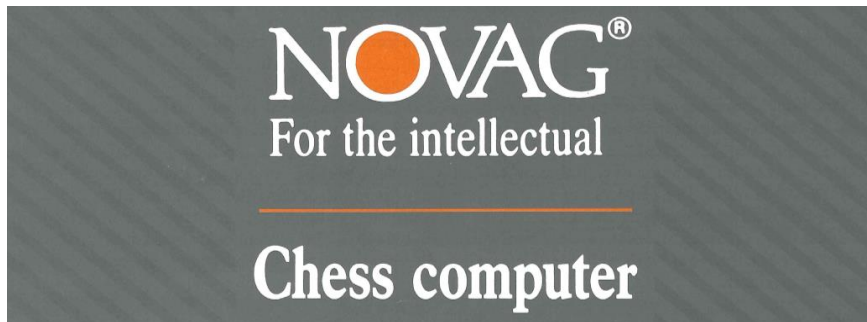
The AMIGO is not only a very strong chess computer with incredible 48 levels of play but also fully portable. The AMIGO is also equipped with 2 Liquid Crystal Display Clocks - one for black and one for white.

The AMIGO measures approximately 4" x 6" and includes a very clear playing surface into which the quality moulded chess men "peg". Each square incorporates a special sensor so the computer knows when and where you have moved. The computer uses rank-and-file lights to tell you of its moves. No codes to think about just challenging chess.

The AMIGO's power comes from a 16K micro computer running at a very fast 8M.Hz. The very comprehensive list of program features are those shown with the AMIGO's table-top twin - the MENTOR 16 which has the same processor and program.

The portability of the AMIGO is completed by the secure latch-down lid which retains the pieces in position whilst on the move, and a memory save so that the AMIGO remembers the position even when it is switched off!

One set of 4 x AAA cells (not supplied) gives 100 hours of great chess on-the-move or an optional 9V. universal mains adaptor gives even greater long term economy at home.



TRAVEL SET—Art. No. 895



## NOVAG® SUPER V.I.P.

The world's strongest truly portable chess computer. Also the world's most handsome with its slimline, 24 control keys and impact resistant presentation case.

The SUPER V.I.P. has a very strong program supported by a 48K micro computer running at 9.8 M.Hz. It offers 48 playing levels split into blitz, tournament, fixed depth, fixed time, training and analysis. The program includes a 20,000 position openings book, the ability to solve mate-in-8 problems and to look up to 8 moves forward at tournament speeds. The SUPER V.I.P. remembers the entire game and can recall it at any time.

For travel purposes the SUPER V.I.P. includes a special "sleep mode" which enables you to disable its buttons so that it can carry on thinking whilst in a top pocket or handbag without risk of the game being cancelled. It also has a memory save for interrupted games.

For home use the SUPER V.I.P. has an RS232 link to the NOVAG SUPER SYSTEM (fully described elsewhere in this brochure). The NOVAG SUPER SYSTEM enables you to connect your SUPER V.I.P. to a PC (most types), a domestic colour TV and to a choice of a compact NOVAG touch sensory board or a beautiful auto sensory chess board in tournament size for ultimate luxury.

Despite its incredible strength one set of 4 x AAA cells (not supplied) will give 200 hours of very challenging chess. For home use the SUPER V.I.P. may be powered through a 9V. universal adaptor.

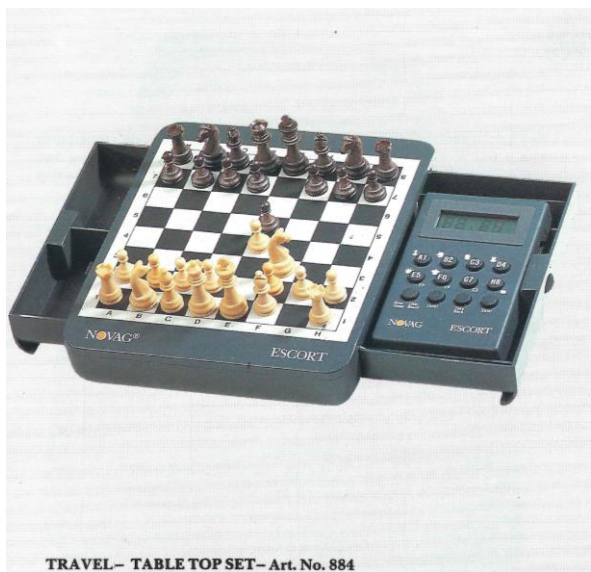
The SUPER V.I.P. is the ideal gift even if you buy it for yourself!!

# Novag Chess Computer 1991

## Novag Amigo

## Novag Super VIP (Super V.I.P.)

(photo copyright © by <http://www.schaakcomputers.nl/>)



TRAVEL- TABLE TOP SET- Art. No. 884



## NOVAG® ESCORT

The NOVAG ESCORT provides all the technical features of the Solo but this time with the advantage of an accompanying beautifully moulded miniature chess set.

The ingenious design includes two drawers: one for storing captured men during play (or all the men during travel) and the other holding the chess computer module. The chess computer module can be removed for use with your favourite chess set whilst at home and replaced in the drawer for travel. The top of the unit forms a very clear miniature chess board for use with the magnetic chess men provided.

As well as the verify, set-up and mate-solve capabilities of the Solo the ESCORT also includes the same memory save feature.

One set of 4 x AAA cells (not supplied) will give you up to 1,000 hours of fascinating chess.

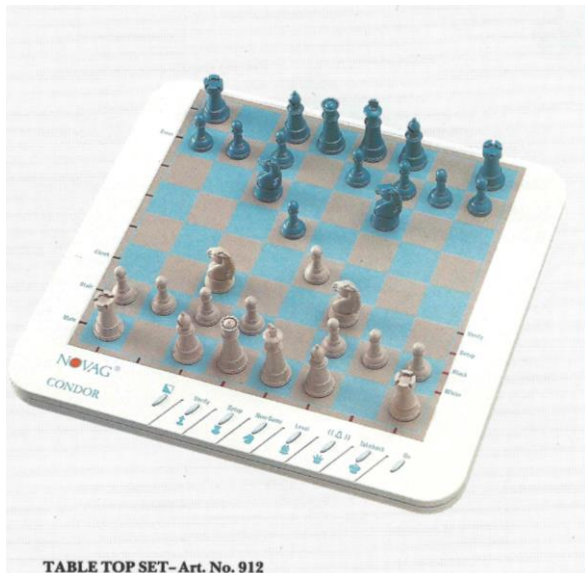
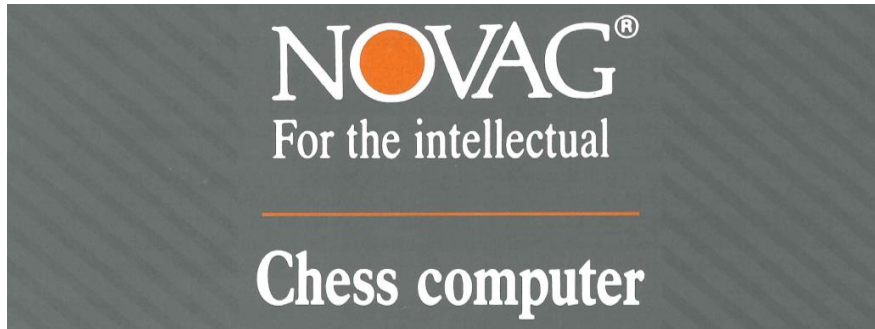


TABLE TOP SET- Art. No. 912



## NOVAG® CONDOR \*NEW FOR 1991\*

Newly designed, the CONDOR is the lowest priced table-top chess computer with a full 9" x 9" push-sensory playing surface and a very modern and handsome white finish. The set comes complete with a set of high quality moulded Staunton pattern chess men with a 2" high king.

The CONDOR is based on the same ultra fast 8M.Hz, 4K micro computer as the Secondo and has the same brilliant 16 level program. It therefore offers the same encouragement and challenge to beginners and experienced players who want to enjoy their chess in the comfort of their homes. It can also solve mate-in-3 problems and has a memory save - useful for long games.

100 hours of challenging chess from 6 x AA alkaline batteries (not supplied) or use an optional 9V. universal mains adaptor for long term economy.

# Novag Chess Computer 1991

## Novag Escort

## Novag Condor

(photo copyright © by <http://www.schaakcomputers.nl/>)





TABLE TOP SET—Art. No. 911



## NOVAG® CRYSTAL

\*NEW FOR 1991\*

The CRYSTAL with its brand new presentation completes the trio of 4K, 8M.Hz NOVAG quality computers. The table-top CRYSTAL offers the same challenging playing strength, versatility and features as its sisters the Secondo and Condor but adds a little extra to place it at the top of the family group.

The CRYSTAL is finished in a sparkling black and silver. The playing surface is made from a tough damage resistant skin placed over a metal plate. The high quality Staunton pieces from the Condor are included but this time with magnetic inserts and felt bases. The magnets anchor the chess men to the chessboard because of the metal plate. This keeps the pieces in place if the pieces or board get knocked.

A little extra to give you the choice.

Many hours of fun from 6 x AA alkaline batteries (not supplied) or use an optional 9V. universal mains adaptor for long term economy.

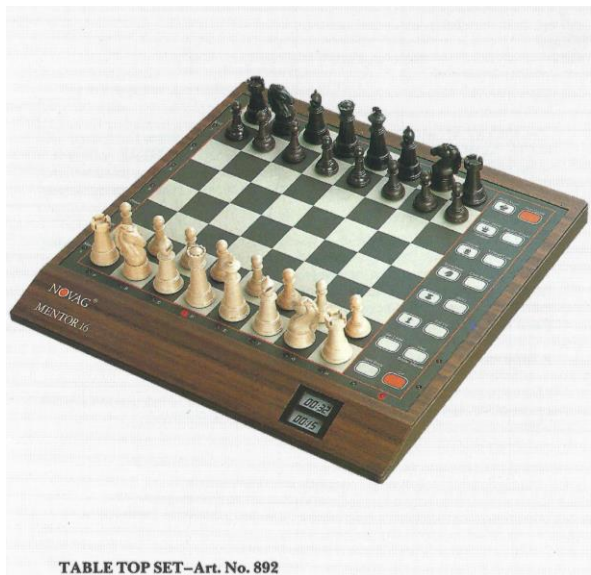
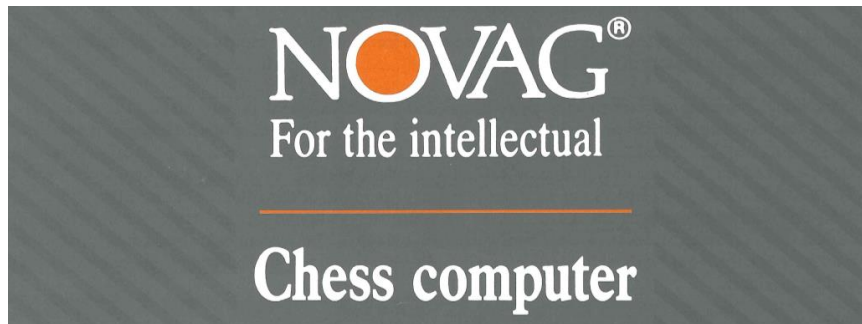


TABLE TOP SET—Art. No. 892



## NOVAG® MENTOR 16

The MENTOR 16 is the best priced table-top chess computer offering twin Liquid Crystal Display Clocks.

The 16K, 8 M.Hz. micro computer at the heart of the MENTOR 16 is the same as that of the Amigo as is the very strong 48 level program. The comprehensive list of features includes; 8,000 pre-stored master opening moves; take-back up to 4 moves for each side; hints (for training); autoplay (plays both sides automatically while you watch); verify; set-up; mate-solve (up to mate-in-5).

The 48 levels are grouped into 8 Training levels, 8 Tournament levels, 8 Speed Chess levels, 8 Fixed Time levels, 8 Fixed Depth levels and 8 Analysis levels making the MENTOR 16 ideal for a wide range of chess players of varying strengths and interests. The MENTOR 16 is also suitable for rapidly improving players.

The MENTOR 16 is presented in a very smart simulated wood veneer. The beautifully moulded plastic pieces have magnetic inserts and felt bases.

150 hours of challenging chess from 6 x AA alkaline batteries (not supplied). An optional 9V. universal mains adaptor may be used for greater long term economy.

# Novag Chess Computer 1991

## Novag Crystal

## Novag Mentor 16

(photo copyright © by <http://www.schaakcomputers.nl/>)



TABLE TOP SET—Art. No. 903



## NOVAG® BELUGA

Named after the finest caviar in the world the NOVAG BELUGA starts life with a reputation to live up to. And so it does. The latest 1990's technology has been employed to make the BELUGA the first mid-range chess computer to run at 16M.Hz! Twice as fast as equivalent previous models. The program offers many features and great playing strength.

The NOVAG BELUGA is the best priced chess computer to offer a full Liquid Crystal Game Display. Not only is clock information displayed but also position evaluation (shows who is winning), depth to which computer is searching and move count.

The NOVAG BELUGA includes all the features of the lower priced NOVAG table-top models plus take back 100 half moves, as well as 44 levels of play and the ability to foresee and announce check mate up to 7 complete moves ahead. And something to reward your very highest efforts - the ability to resign!

150 hours of challenging chess from 6 x AA alkaline batteries (not supplied). An optional 9V. universal mains adaptor may be used for greater long term economy.

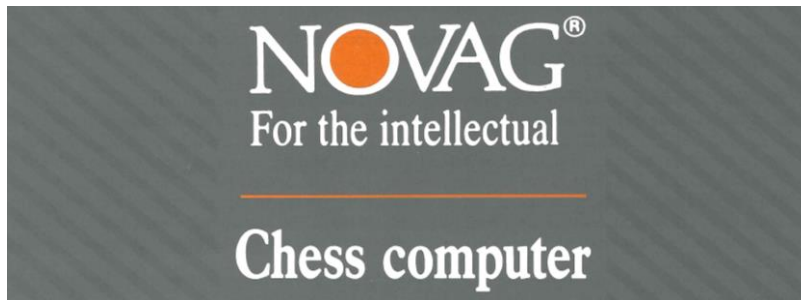


TABLE TOP SET—Art. No. 904



## NOVAG® SUPER NOVA

A Super Nova is the strongest and most energetic force in the known universe. That of an exploding star. The NOVAG SUPER NOVA is the strongest 32K table-top chess computer in the known universe. Again NOVAG have employed 1990's technology to produce this miracle. A new 16M.Hz micro computer with 8K Ram. That's twice as fast and four times the working memory of previous equivalent models.

The NOVAG SUPER NOVA is the top model of the medium priced NOVAG quality range and as such offers a very wide range of features and a very strong program. Outstanding features include complete game re-call, solution to mate-in-14 problems and 15,000 pre-stored openings from Master Chess. One other major feature is an RS232 link to the NOVAG SUPER SYSTEM (fully described elsewhere in this brochure).

The NOVAG SUPER SYSTEM enables you to connect the SUPER NOVA to a PC (most types), a domestic colour TV or the beautiful tournament sized NOVAG auto sensory wooden chess board for ultimate luxury.

The SUPER NOVA will run from 6 x AA alkaline batteries or a special mains adaptor (not supplied) to local power standards.

# Novag Chess Computer 1991

## Novag Beluga

## Novag Super Nova

(photo copyright © by <http://www.schaakcomputers.nl/>)





TABLE TOP SET—Art. No. 901



### NOVAG® SUPER FORTE "C"

The NOVAG SUPER FORTE C is the top strength push-sensory chess computer of the NOVAG range and undoubtedly the best strength to price ratio of any Super chess computer yet produced. The NOVAG SUPER FORTE C is based on a micro computer with a 96K program memory, 8K working area and running at 6 M.Hz. The SUPER FORTE C incorporates a very sensitive 8" square sensor board in a slimline modern matt black finish casing. There are 24 control buttons giving access to a dazzling array of features which not only provide 65 levels of chess but also to a wealth of analysis tools for the serious player.

The SUPER FORTE C can be used by all players from beginner right up to master standard. It can provide some hope of victory to even the youngest player at its most basic levels, plus a serious challenge to an international player at its blitz and tournament levels.

The SUPER FORTE C has an RS232 link to the NOVAG SUPERSYSTEM. This will enable its full thought processes to be recorded on a PC (most types) or the game to be displayed or recalled on to a domestic colour TV (useful at home or at the Chess Club). Also the SUPER FORTE C can be used with the NOVAG auto sensory board, making it the best possible combination of a convenient portable computer which can be taken to a club or on holiday or played with the luxury of a full sized tournament board at home. The SUPER FORTE C may be connected to the NOVAG CHESS PRINTER (described elsewhere in this brochure). By far the finest chess printer available.

The SUPER FORTE C will never become obsolete. As new programming ideas develop the memory chips can be replaced economically so that your top chess computer remains top!

The SUPER FORTE C will run from 6 x "C" cells or special mains adaptor (supplied separately).

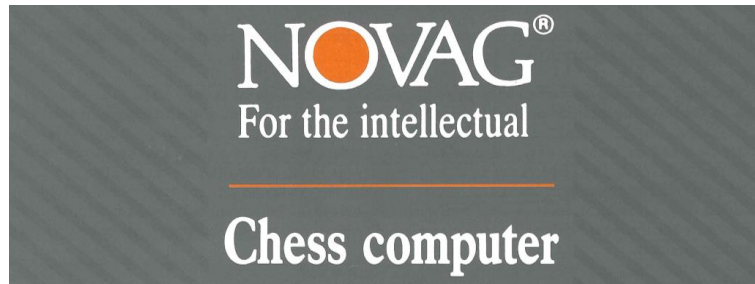


TABLE TOP SET—Art. No. 902



### NOVAG® SUPER EXPERT "C"

Now the top of the NOVAG range with all the luxury of a polished wood housing and playing surface, magnificent hand carved chess pieces from India, the ancient home of chess, and all the electronic wizardry of the Super Forte C. Under the polished wood chess board there are special switches which are operated by the chess pieces without the player even having to press. It is only necessary for the player to play chess naturally. Each of the 64 playing squares has a small light which indicates which piece the computer wishes to move. The simplest possible method for the computer to communicate its move to you.

Electronically the SUPER EXPERT C is exactly similar to the Super Forte C. Likewise it includes a 16 character dot matrix display through which it communicates its analysis and other information to you, the user.

The SUPER EXPERT C may be connected to the NOVAG SUPER SYSTEM and the NOVAG CHESS PRINTER. It, therefore, is not only an elegant piece of furniture but also the heart of an ultra-modern electronic chess playing, display, storage and retrieval system.

The SUPER EXPERT C is the ultimate chess computer for any serious chess player and will remain so because its memory can be upgraded as new programs are developed periodically. The SUPER EXPERT C is, therefore, a really good investment for all those who truly love their chess.

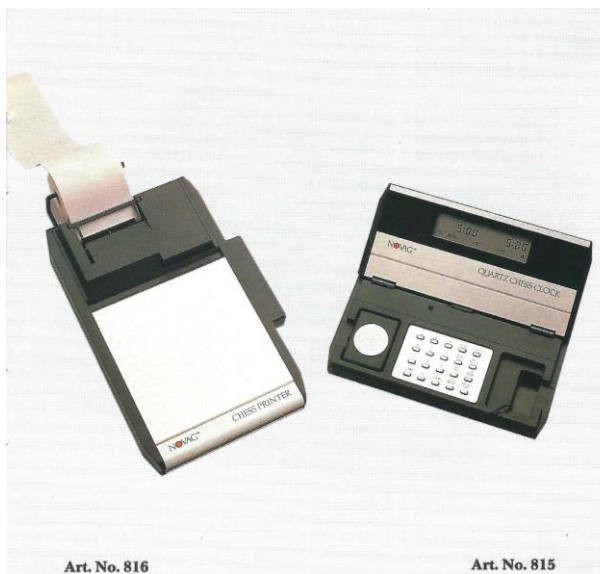
The SUPER EXPERT C uses a special mains adaptor (supplied separately).

# Novag Chess Computer 1991

## Novag Super Forte C

## Novag Constellation Super Expert C

(photo copyright © by <http://www.schaakcomputers.nl/>)



## NOVAG® ACCESSORIES

### NOVAG CHESS PRINTER

The NOVAG CHESS PRINTER is by far the best chess printer in the world.

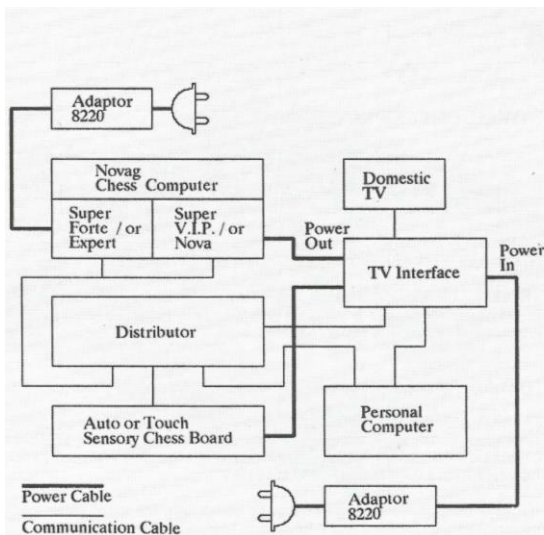
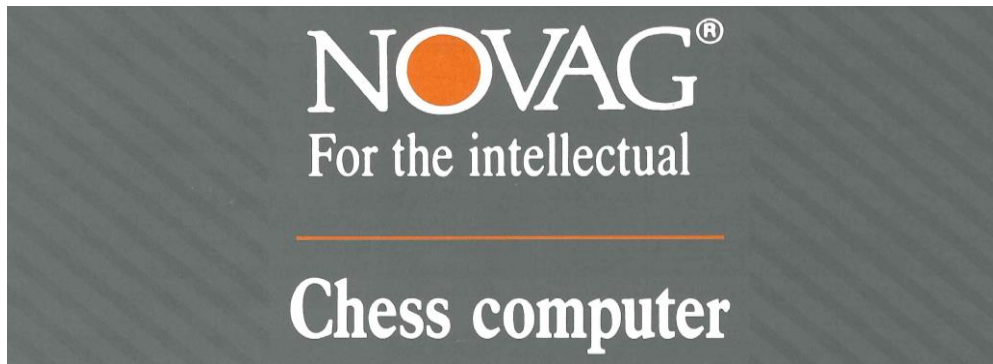
It is primarily intended for use with the SUPER FORTE C and SUPER EXPERT C as a simple method to record games, board positions, move times and position evaluations. It can also be used with some classic NOVAG CHESS COMPUTERS from earlier ranges including the world beating NOVAG SUPER CONSTELLATION and NOVAG EXPERT.

The NOVAG CHESS PRINTER is silent in operation, uses paper available in calculator shops, and is supplied complete with its own special mains adaptor and two rolls of paper to start you off.

### NOVAG CHESS CLOCK

The NOVAG CHESS CLOCK is a superb battery operated electronic chess clock which can be used on its own or with certain classic NOVAG CHESS COMPUTERS from earlier ranges including the NOVAG SUPER CONSTELLATION and NOVAG EXPERT.

Its many programmable features include countdown for speed chess and beeper warnings for fixed move-time chess (e.g. every 10 seconds).



## NOVAG® SUPER SYSTEM

Novag has a continuing programme of using the latest technology to provide chess enthusiasts with more and more facilities as well as increasingly strong chess programs. New for 1991 is the NOVAG SUPER SYSTEM, a multimedia system which enables you to connect the Novag chess computers of the new generation (Super VIP, Super Nova, Super Forte C, Super Expert C) to a domestic TV and/or personal computer as well as a choice of touch sensory or auto sensory chess boards. The diagram shows how easily and powerfully the NOVAG SUPER SYSTEM can be utilised.

Each SUPER SYSTEM component contains software which is compatible with a wide range of low cost proprietary software.

The Novag Adaptor 8220 (AV 8.5V 0.8A) can power the whole NOVAG SUPER SYSTEM when using the Super VIP or Super Nova chess computer. When using the Novag Super Expert C / Forte C you will need an additional adaptor to power these chess computers.

# Novag Chess Computer 1991 Novag Chess Printer & Novag Chess Clock Novag Super System

(photo copyright © by <http://www.schaakcomputers.nl/>)





Art. No. 8919



Art. No. 896



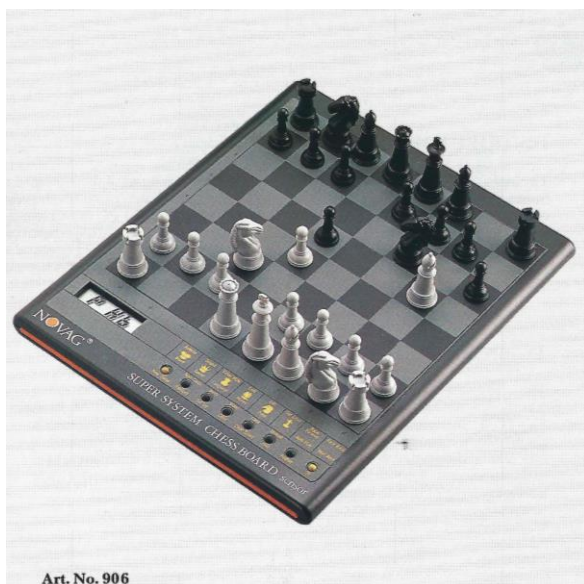
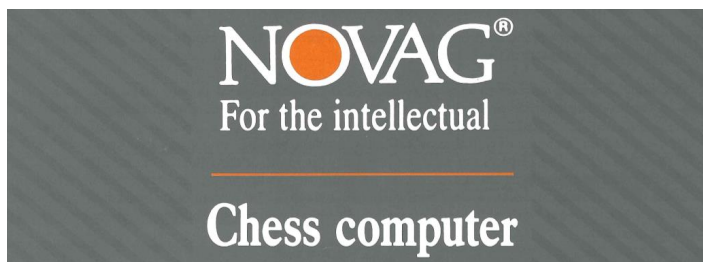
## NOVAG® SUPER SYSTEM

### DISTRIBUTOR

The NOVAG DISTRIBUTOR (Art. No. 8919) forms the heart of the Novag Super System. This low cost unit which is separately available provides the connections and the cables (1 long communication cable and 1 PC cable) to enable two or more of the Super System Accessories to be connected together. It enables your Novag chess computer or the external Novag sensor boards to be connected directly to a personal computer or with the aid of the Novag TV-Interface to your domestic colour television set.

### TV - INTERFACE

The NOVAG TV-INTERFACE (Art. No. 896) is one of the many accessories which can be used in connection with the NOVAG SUPER SYSTEM. It translates signals received from the Distributor and converts them to local colour TV standards so that you can see your game and analysis on a regular domestic colour TV set. This is very interesting for chess teachers and tournament organisers as well as for use at home. (All cables which are necessary to operate the units are provided).



Art. No. 906



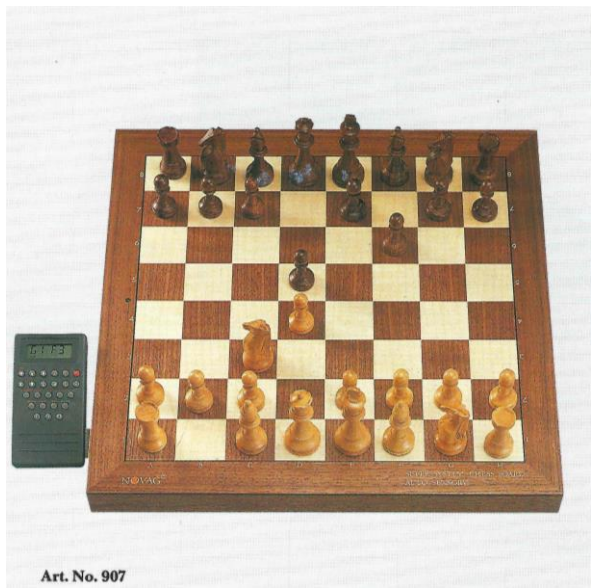
## NOVAG® SUPER SYSTEM

### TOUCH SENSORY BOARD

The NOVAG TOUCH SENSORY BOARD can transmit chess moves made on its sensor playing surface to the SUPER SYSTEM DISTRIBUTOR from where they can be displayed on your domestic colour TV, transmitted to a personal computer or to a chess computer within the NOVAG SUPER SYSTEM. It can also receive signals and indicate moves.

# Novag Chess Computer 1991 Novag Distributor & TV Interface Novag Touch Sensory Board

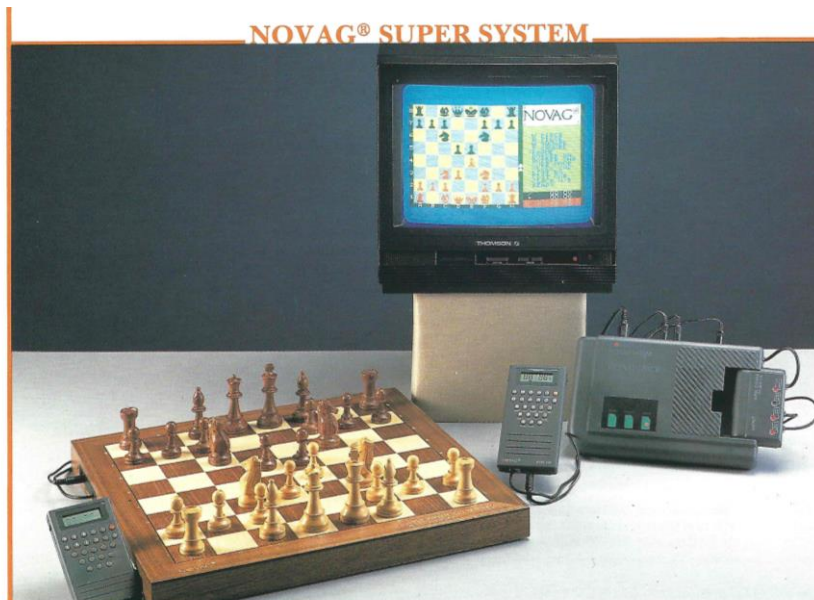
(photo copyright © by <http://www.schaakcomputers.nl/>)



## NOVAG® SUPER SYSTEM

### AUTO SENSORY BOARD

The NOVAG TOURNAMENT AUTO SENSORY BOARD communicates through the NOVAG DISTRIBUTOR the same way as described for the NOVAG TOUCH SENSORY BOARD. This magnificent wooden chess board in tournament size provides full playing capabilities and analysis features and therefore has an important use for chess clubs and tournament organisers because games played on it can be automatically recorded in a personal computer and / or displayed on a TV screen for commentary.



# Novag Chess Computer 1991 Novag Auto Sensory Board Novag Super System

(photo copyright © by <http://www.schaakcomputers.nl/>)



# Novag Chess Computers in Comparison

With the help of this list you can find fast and very simple the NOVAG chess computer, which is best suited for you. This list shows all functions and features of each set offered by NOVAG.	SOLO	ESCORT	SECONDO	CONDOR/CRYSTAL	AMIGO/MENTOR 16	SUPER V.I.P.	BELUGA	SUPER NOVA	SUPER FORTE C	SUPER EXPERT C
1. Microprocessor	Singlechip	Singlechip	Singlechip	Singlechip	Singlechip	HD 6301	Singlechip	HD 6301	6502	6502
2. Program capacity	2 KByte	2 KByte	4 KByte	4 KByte	16 KByte	48 KByte	16 KByte	32 K	96 KByte	96 KByte
3. Random access memory	192 Byte	192 Byte	256 Byte	256 Byte	256 Byte	2 KByte	2 KByte	8 KByte	8 KByte	8 KByte
4. System clock speed	8 MHz	8 MHz	8 MHz	8 MHz	8 MHz	9.8 MHz	16 MHz	16 MHz	6 MHz	6 MHz
5. Playing levels	8	8	16	16	48	48	44	48	65	65
6. Tournament levels	1	1	1	1	8	8	8	8	15	15
7. Training levels					8	3*)	3*)	8	5	5
8. Blitztournament levels					24	1	1	8	8	8
9. Analysis levels					8	1	1	8	19	19
10. Liquid crystal display	X	X			X	X	X	X	X	X
11. Information – LCD						X	X	X	X	X
12. Making a move	Key-board	Key-board	Sensor-board	Sensor-board	Sensor-board	Key-board	Sensor-board	Sensor-board	Sensor-board	Magnetic-board
13. Showing a move	LCD	LCD	16LEDs	16LEDs	LCD/LEDs	LCD	LCD/LEDs	LCD/LEDs	LCD/LEDs	LCD/16LEDs
14. Opening book in halfmoves	ca. 100	ca. 100	ca. 1650	ca. 1650	ca. 8000	ca. 20,000	ca. 3,000	>15.000	>32.000	>32.000
15. Opening memory						X	X	X	X	X
16. Opening book-programmeable/selectable									pro./select	pro./select
17. Take Back in halfmoves	2	2	4	4	8	190	100	all	250	250
18. Set Up Mode	X	X	X	X	X	X	X	X	X	X
19. Verify Mode	X	X	X	X	X	X	X	X	X	X
20. Solves most Mate in	3	3	3	3	5	8	9	14	14	14
21. Random generator	X	X	X	X	X	X	X	X	X	X
22. Memory	X	X	X	X	X	X	X	X	X	X
23. Autoplay					X	X	X	X	X	X
24. Mate announcement					X	4	7	7	7	7
25. Display of depth in halfmoves						X	X	X	X	X
26. Depth search (Tournament level)			X	X	X	6	7	7	8	8
27. Strategy of endgame			X	X	X	X	X	X	X	X
28. Can resign						X	X	X	X	X
29. Referee function					X	X	X	X	X	X
30. Move suggestion	X	X	X	X	X	X	X	X	X	X
31. Replay of game						X		X	X	X
32. Shows score						X	X	X	X	X
33. Integrated Chess Clock					X	X	X	X	X	X
34. Novag Printer connection									X	X
35. Novag Super System connection						X		X	X	X
36. Operation	Battery	Battery	Battery	Battery/Adapt	Battery/Adapt	1Battery/Adapt	Battery/Adapt	Battery/Adapt	Battery/Adapt	Adapt
37. Approx. measurements in cm	11.7x5.6x1.4	15.3x13.0x3.0	20.6x9.5x3.0	28.2x29.8x2.5	10.4x15.1x3.3/ 27.3x27.5x2.8	15.7x8.2x2.1	23.4x28.4x2.7	23.4x28.4x2.7	26.5x37x3.4	47.5x40x5.5
38. Suitable for:										
39. Master-/Tournament Players						X	X	X	X	X
40. Strong-/Club Players					X	X	X	X	X	X
41. Beginners-/Novices-/Occasional Players	X	X	X	X	X	X	X	X	X	X
42. Playing hours	1000 hrs.	1000 hrs.	100 hrs.	100 hrs.	100hrs./150hrs.	200 hrs.	150 hrs.	50 hrs.		

\*EASY-MODE LEVEL: Computing during the opponents turn stops.

## Novag Chess Computer 1991

(photo copyright © by <http://www.schaakcomputers.nl/>)