**04-1982** [A-1843] CXG - **Computachess I**

On special request of collector Luuk Hofman I am making an item about this chess computer. The exact release date is impossible for me to determine, but from all my database data I conclude that this chess computer was commercially available somewhere in the spring of 1982. The type designation CXG-022 (CXG 022) shows that this is a very early model.
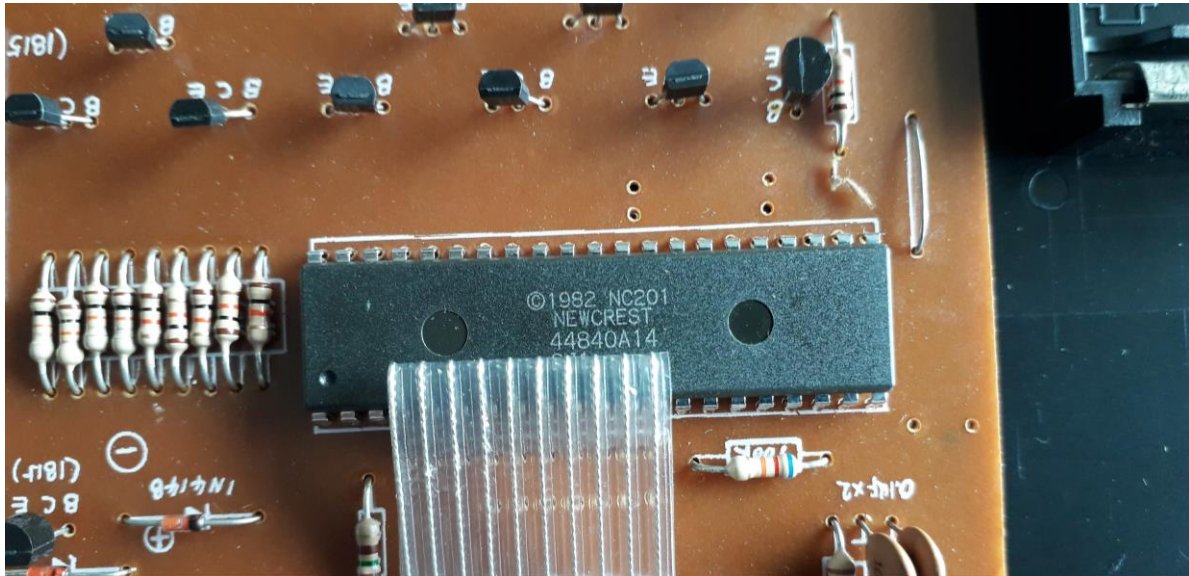

The photo is showing the Microcontroller Hitachi HD44840 from 1982.
(photo copyright © by http://www.schaakcomputers.nl/)

COMPUTACHESS I
022

8 LEVEL CHESS COMPUTER

- Up to 8 levels of difficulty
- 500 hours of battery life using 4 penlite batteries (not included) — with memory save feature
- Computer plays may standard openings
- Castiling, en passant, pawn promotion
- Play black or white
- Verify position
- Takeback moves
- Audible indication of moves by TONE (which can be turned off)
- Changing side in middle of game
- Plus many more challenging features
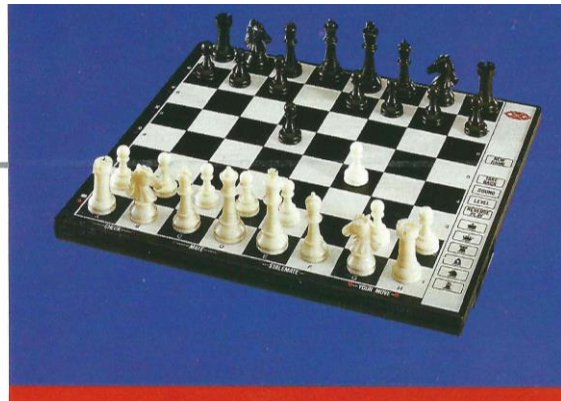
◇◇◇ SPHINX

The above image is from a 1989 CXG brochure. The company "White and Allcock" began producing chess computers in 1979. In 1984, White and Allcock continued under the name "CXG Newcrest Technology". The brand name "Sphinx" was added in 1987.
(Source: CXG Newcrest Technology Ltd. Hong Kong) (photo copyright © by http://www.schaakcomputers.nl/) (600 dpi)

CXG Computachess II has the same chess program as Computachess I and also appeared on the market in 1982, but was a lot larger as a sensor table model with a storage compartment for the chess pieces. Computachess I was offered commercially from 1982 through 1991. Actually a very long time for such a basic model. CXG thus shows that this cash-and-carry product was a sales success and was put into production again and again. In the USA the asking price in 1986 was $ 100,-- and in Germany in 1990 they still asked about DM 99,--. The chess program is by David Levy and Mark Taylor.

CXG-002

CXG COMPUTACHESS II

8 LEVEL CHESS COMPUTER

- Up to 8 levels of difficulty
- 500 hours of battery life using 4 penlite batteries (not included) — with memory save feature
- Computer plays may standard openings
- Castiling, en passant, pawn promotion
- Play black or white
- Verify position
- Takeback moves
- Audible indication of moves by TONE (which can be turuned off)
- Changing side in middle of game
- Plus many more challenging features

ORDINATEUR JEU D'ECHECS A 8 NIVEAUX DE DIFFICULTE

- Jusqu'a 8 degres de difficulte
- Durée des piles: 500 heures avec 4 piles (non-incluses) — Conservation de la memoire
- L'ordinateur joue de nombreuses ouvertures standard
- Roque, capture en passant, echange des pions
- Possibilités de dejouer
- Verification de la position
- Joue noir ou blanc
- Indication audible des coups par TONALITE (qui peut etre etainte)
- Changement de cote en cours de partie
- Plus beaucoup d'autres fonctions

SCHACH-COMPUTER MIT 8 SCHWIERIGKEITSGRADEN

- Bis zu 8 Schwierigkeitgrade
- 500 Stunden Batterieleben bei Gebrauch, von 4 (nicht inbegriffen) Taschenlampenbatterien — mit Specicher Ausstattung
- Der Computer enthält eine Zahl geläufiger Schacheröffnungen
- Rochade, en passant, Bauernumwandlung
- Sie können schwarz oder weiss spielen
- Stellungskontrolle
- Rücknahme von Zügen
- Hörbare Angabe von Zügen durch Klangeffekte (Klangeffekte konnen abgestellt werden)
- Seitenwechsel wahrend des Spieles
  Sowie viele andere interessante Ausstattungsmerkmale

SCHAAK COMPUTER MET 8 NIVEAUS

- 8 Verschillend speel-sterkteniveau's
- Speelt 500 uur op 4 alkaline penlight batterijen (niet bijgeleverd). — met geheugenslag.
- Computer speelt de meest bekende boekopeningen.
- Rocheert, Slaat en-passant en promoveert.
- Speelt met zwart en wit.
- Positieverificatie.
- Neemt desgewenst zetten terug.
- Audio feed-back (kan uitgeschakeld worden).
- Tijdens het spel kan van kleur wroden gewisseld.

CXG Computachess II, release: 1982. CXG Computachess I, Computachess II and Galaxy Mark II (to name a few) all have an identical chess program.
(Source: CXG Systems S.A. – Hong Kong 1985) (photo copyright © by http://www.schaakcomputers.nl/) (600 dpi)

CXG-011

CXG GALAXY MARK II

8 LEVEL CHESS COMPUTER

- Up to 8 levels of difficulty
- 500 hours of battery life using 4 penlite batteries (not included) — with memory save feature
- Computer plays may standard openings
- Castiling, en passant, pawn promotion
- Play black or white
- Verify position
- Takeback moves
- Audible indication of moves by TONE (which can be turuned off)
- Changing side in middle of game
- Plus many more challenging features

ORDINATEUR JEU D'ECHECS A 8 NIVEAUX DE DIFFICULTE

- Jusqu'a 8 degres de difficulte
- Durée des piles: 500 heures avec 4 piles (non-incluses) — Conservation de la memoire
- L'ordinateur joue de nombreuses ouvertures standard
- Roque, capture en passant, echange des pions
- Possibilités de dejouer
- Verification de la position
- Joue noir ou blanc
- Indication audible des coups par TONALITE (qui peut etre etainte)
- Changement de cote en cours de partie
- Plus beaucoup d'autres fonctions

SCHACH-COMPUTER MIT 8 SCHWIERIGKEITSGRADEN

- Bis zu 8 Schwierigkeitgrade
- 500 Stunden Batterieleben bei Gebrauch, von 4 (nicht inbegriffen) Taschenlampenbatterien — mit Specicher Ausstattung
- Der Computer enthält eine Zahl geläufiger Schacheröffnungen
- Rochade, en passant, Bauernumwandlung
- Sie können schwarz oder weiss spielen
- Stellungskontrolle
- Rücknahme von Zügen
- Hörbare Angabe von Zügen durch Klangeffekte (Klangeffekte konnen abgestellt werden)
- Seitenwechsel wahrend des Spieles
  Sowie viele andere interessante Ausstattungsmerkmale

SCHAAK COMPUTER MET 8 NIVEAUS

- 8 Verschillend speelsterkteniveau's
- Speelt 500 uur op 4 alkaline penlight batterijen (niet bijgeleverd). — met geheugenopslag.
- Computer speelt de meest bekende boekopeningen.
- Rocheert, Slaat en-passant en promoveert.
- Speelt met zwart en wit.
- Positieverificatie.
- Neemt desgewenst zetten terug.
- Audio feed-back (kan uitgeschakeld worden).
- Tijdens het spel kan van kleur wroden gewisseld.

CXG Galaxy Mark II, release: 1985. CXG Computachess I, Computachess II and Galaxy Mark II (to name a few) all have an identical chess program.

(Source: CXG Systems S.A. – Hong Kong 1985) (photo copyright © by http://www.schaakcomputers.nl/) (600 dpi)

CXG COMPUTACHESS I

CXG-022

8 LEVEL CHESS COMPUTER

- Up to 8 levels of difficulty
- 500 hours of battery life using 4 penlite batteries (not included) — with memory save feature
- Computer plays may standard openings
- Castiling, en passant, pawn promotion
- Play black or white
- Verify position
- Takeback moves
- Audible indication of moves by TONE (which can be turuned off)
- Changing side in middle of game
- Plus many more challenging features

ORDINATEUR JEU D'ECHECS A 8 NIVEAUX DE DIFFICULTE

- Jusqu'a 8 degres de difficulte
- Durée des piles: 500 heures avec 4 piles (non-incluses) — Conservation de la memoire
- L'ordinateur joue de nombreuses ouvertures standard
- Roque, capture en passant, echange des pions
- Possibilités de dejouer
- Verification de la position
- Joue noir ou blanc
- Indication audible des coups par TONALITE (qui peut etre etainte)
- Changement de cote en cours de partie
- Plus beaucoup d'autres fonctions

SCHACH-COMPUTER MIT 8 SCHWIERIGKEITSGRADEN

- Bis zu 8 Schwierigkeitgrade
- 500 Stunden Batterieleben bei Gebrauch, von 4 (nicht inbegriffen) Taschenlampenbatterien — mit Specicher Ausstattung
- Der Computer enthält eine Zahl geläufiger Schacheröffnungen
- Rochade, en passant, Bauernumwandlung
- Sie können schwarz oder weiss spielen
- Stellungskontrolle
- Rücknahme von Zügen
- Hörbare Angabe von Zügen durch Klangeffekte (Klangeffekte konnen abgestellt werden)
- Seitenwechsel wahrend des Spieles
  Sowie viele andere interessante Ausstattungsmerkmale

SCHAAK COMPUTER MET 8 NIVEAUS

- 8 Verschillend speelsterkteniveau's
- Speelt 500 uur op 4 alkaline penlight batterijen (niet bijgeleverd). — met geheugenslag.
- Computer speelt de meest bekende boekopeningen.
- Rocheert, Slaat en-passant en promoveert.
- Speelt met zwart en wit.
- Positieverificatie.
- Neemt desgewenst zetten terug.
- Audio feed-back (kan uitgeschakeld worden).
- Tijdens het spel kan van kleur wroden gewisseld.

CXG Computachess I, release: 1982. CXG Computachess I, Computachess II and Galaxy Mark II (to name a few) all have an identical chess program.
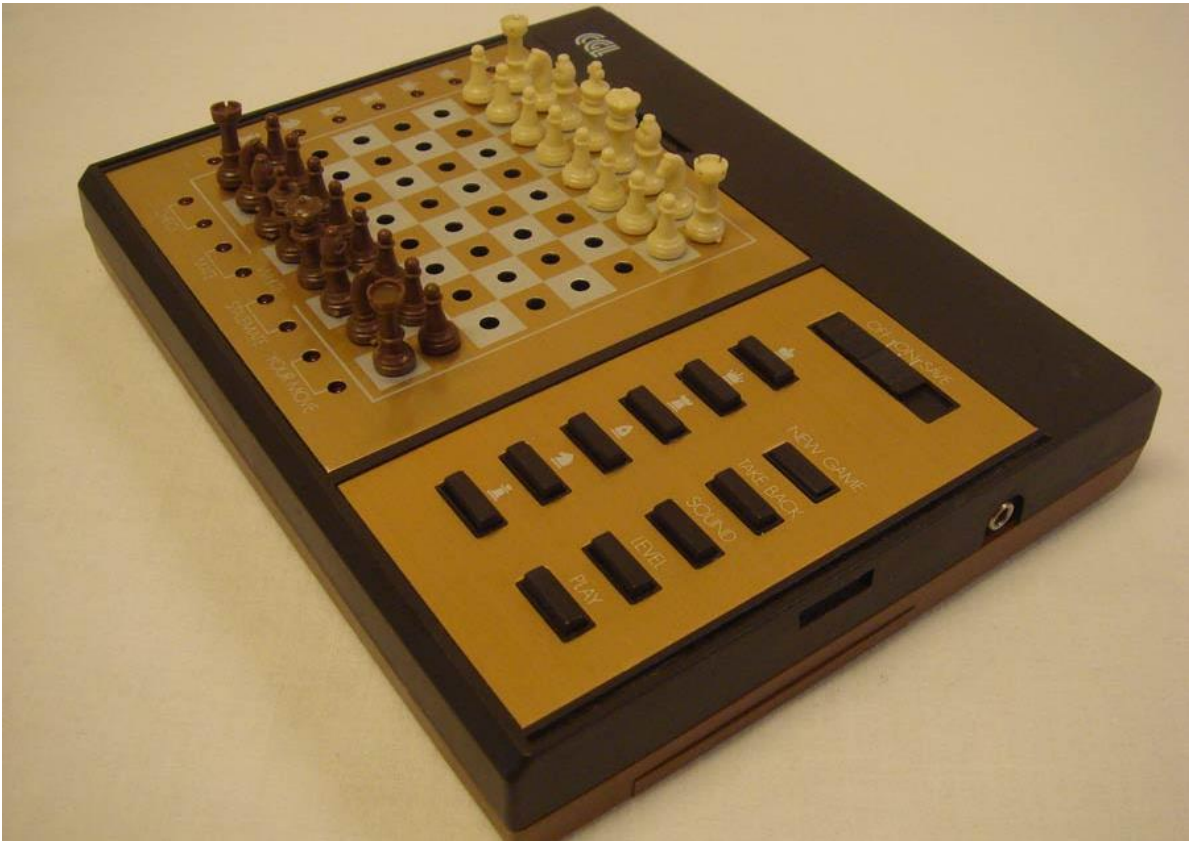
Computer Games Limited (CGL) released Computachess Travel Sensory in 1983 for £39.95. This model has the same chess program as CXG Advanced Portachess and Hanimex Computachess II (travel model HCG 1600).

If you're carrying out a move of the computer's, and you press a wrong square (or press a key, other than NEW GAME or SOUND), you will hear a rapid treble beep instead of the normal single beep. Simply continue carrying out the move as indicated by the lights.

6. LEVELS OF PLAYING STRENGTH

COMPUTACHESS I has eight levels of playing strength. The following table gives the approximate average time it takes over a move on each level:—

Level	Time
1	5 sec.
2	10 sec.
3	15 sec.
4	3 min.
5	4 min.
6	10 min.
7	12 min.
8	14 min.

Note that the time taken over a particular move will sometimes differ considerably from the average time for the respective level. In a complicated position, with queens and many other pieces on the board, COMPUTACHESS I is likely to use much more thinking time than in a simple position.*

At any time when it is your move, you can check the level on which the computer is currently playing. Press the key marked LEVEL. You will then see one or more lights on, at the left-hand edge of the chessboard. If only the bottom light is on, the computer is playing on Level 1. If two lights are on, it's set for Level 2 — and so on.

* From the lights flashing on and off while the computer is thinking, you can tell which move it assesses as best at each stage of its analysis.

4

Model Name	Model No.	Estimated Program Rating	Microprocessor Type	Speed (Mega Hertz)	ROM Size (bit)	RAM Size (bit)	Levels	Solves Mate-in.. Problems	Display Move under Consideration	Long Term Memory	Thinks in Opponent's Time
COMPUTACHESS	CXG-001	1100+	4 bit single chip	0.70	2K × 10	128 × 4	16	–	–	yes	–
COMPUTACHESS II	CXG-002	1450	4 bit single chip	0.80	4K × 10	256 × 4	8	–	yes	yes	–
COMPUTACHESS III	CXG-008	1600	8 bit single chip	1.78	4K × 8	129 × 9	16	4	–	yes	yes
COMPUTACHESS I	CXG-022	1450	4 bit single chip	0.80	4K × 10	256 × 4	8	–	yes	yes	–
ADVANCED PORTACHESS	CXG-201	1450	4 bit single chip	0.80	4K × 10	256 × 4	8	–	yes	yes	–
PORTACHESS	CXG-202	1100+	4 bit single chip	0.70	2K × 10	128 × 4	16	–	–	yes	–
ENTERPRISE 'S'	CXG-208	1600	8 bit single chip	1.78	4K × 8	128 × 8	16	4	yes	yes	yes
STARCHESS	CXG-209	1600	8 bit single chip	1.78	4K × 8	128 × 8	16	4	yes	yes	yes
SUPER ENTERPRISE	CXG-210	1900	8 bit single chip	2.00	16K × 8	2.25K × 8	44	12	yes	yes	yes
SUPER ENTERPRISE LCD	CXG-210C	1900	8 bit single chip	2.00	16K × 8	2.25K × 8	44	12	yes	yes	yes
ADVANCED STARCHESS	CXG-211	1900	8 bit single chip	2.00	16K × 8	2.25K × 8	44	12	yes	yes	yes
SUPER CROWN	CXG-218	1900	8 bit single chip	2.00	16K × 8	2.25K × 8	44	12	yes	yes	yes
PORTACHESS II	CXG-223	1100+	4 bit single chip	0.70	2K × 10	128 × 4	16	–	–	yes	yes
COMPUTACHESS IV	CXG-227	1100+	4 bit single chip	0.70	2K × 10	128 × 4	16	–	–	yes	–
CROWN	CXG-228	1600	8 bit single chip	1.78	4K × 8	128 × 8	16	4	yes	yes	yes
SPHINX GALAXY	CXG-230	2150-2200	8 bit 65C02-4 CPU	4.00	32K × 8	8K × 8	56	10	6 ply	yes	yes
PORTACHESS III	CXG-233	1450	4 bit single chip	0.80	4K × 10	256 × 4	8	–	yes	yes	–
SPHINX JUNIOR	CXG-237	1200+	4 bit single chip	1.00	4K × 10	160 × 4	64	–	–	yes	–
SPHINX DOMINATOR	CXG-239	2150-2200	8 bit 65C02-4 CPU	4.00	32K × 8	8K × 8	56	10	6 ply	yes	yes
SPHINX ROYAL	CXG-240	1450	4 bit single chip	1.00	4K × 10	160 × 4	64	–	–	yes	–
ChessCard	CXG-241	1200	4 bit single chip	0.50	4K × 10	160 × 4	64	–	–	yes	–
CHESS 3000	CXG-3000	1850	8bit 280 CPU	8.00	8K × 5	2K × 8	12	4	yes	–	yes
CHESS 3008	CXG-3008	1900	8 bit single chip	2.00	16K × 8	2.25K × 8	44	12	yes	yes	yes
SPHINX COMMANDER	CXG-3018	2150-2200	8 bit 65C02-4 CPU	4.00	32K × 8	8K × 8	56	10	6 ply	yes	yes
SPHINX 40+	CXG-3038	2150-2200	8 bit 65C02-4 CPU	4.00	32K × 8	8K × 8	56	10	6 ply	yes	yes
SPHINX 50+	CXG-3048	2150-2200	16 bit 68000-8 CPU	8.00	32K × 16	64K × 16	Infinite	15	yes	yes	yes

CXG Chess Reference Chart – Spring 1989

(Source: CXG Newcrest Technology Ltd. Hong Kong – Spring 1989) (photo copyright © by http://www.schaakcomputers.nl/) (600 dpi)
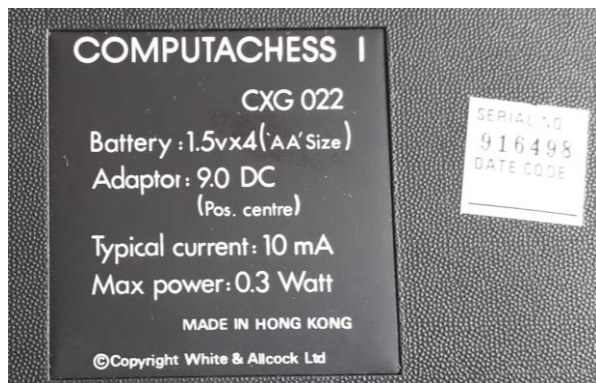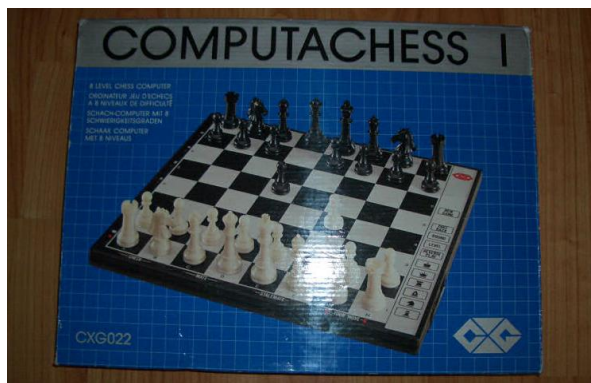
Model Name	Model No.	Take Back Moves	Position Set-up	Position verifi-cation	Multi-Move	Hint	Chess Clock	Book Openings	User Pro-grammable Library	Battery Operated	Typical Battery Life* (Hour)	Adaptor Option	Chess Board Type	Chess Board Size (mm)	Overall Size (mm) (Main unit) W × D × H
COMPUTACHESS	CXG-001	–	–	–	–	–	–	–	–	1 × 9V	100	yes	Sensory	80 × 80	175 × 120 × 25
COMPUTACHESS II	CXG-002	2	–	yes	–	–	–	–	–	4 × AA	250	yes	Sensory	205 × 205	250 × 325 × 53
COMPUTACHESS III	CXG-008	4	yes	yes	–	–	–	300	–	4 × AA	250	yes	Sensory	233 × 233	270 × 245 × 24
COMPUTACHESS I	CXG-022	2	–	yes	–	–	–	–	–	4 × AA	250	yes	Sensory	233 × 233	270 × 245 × 24
ADVANCED PORTACHESS	CXG-201	2	–	yes	–	–	–	–	–	4 × AA	250	yes	Sensory	83 × 83	172 × 141 × 28
PORTACHESS	CXG-202	–	–	–	–	–	–	–	–	4 × AA	250	–	Sensory	83 × 83	177 × 121 × 28
ENTERPRISE 'S'	CXG-208	4	yes	yes	yes	yes	–	300	–	4 × AA	200	yes	Sensory	295 × 295	418 × 314 × 26
STARCHESS	CXG-209	4	yes	yes	yes	yes	–	300	–	1 × 9V	100	yes	Sensory	81 × 81	190 × 105 × 28
SUPER ENTERPRISE	CXG-210	120	yes	yes	yes	yes	yes	6000	250	4 × AA	200	yes	Sensory	295 × 295	418 × 314 × 26
SUPER ENTERPRISE LCD	CXG-210C	120	yes	yes	yes	yes	LCD × 2	6000	250	4 × AA	200	yes	Sensory	295 × 295	418 × 314 × 26
ADVANCED STARCHESS	CXG-211	120	yes	yes	yes	yes	yes	6000	250	1 × 9V	100	yes	Sensory	81 × 81	190 × 105 × 28
SUPER CROWN	CXG-218	120	yes	yes	yes	yes	yes	6000	250	4 × AA	200	yes	Sensory	233 × 233	320 × 298 × 24
PORTACHESS II	CXG-223	–	–	–	–	–	–	–	–	1 × 9V	100	yes	Sensory	81 × 81	190 × 105 × 28
COMPUTACHESS IV	CXG-227	–	–	–	–	–	–	–	–	4 × AA	250	–	Sensory	233 × 233	270 × 245 × 24
CROWN	CXG-228	4	yes	yes	yes	yes	–	300	–	4 × AA	200	yes	Sensory	233 × 233	320 × 298 × 24
SPHINX GALAXY	CXG-230	Whole	yes	yes	yes	yes	LCD × 2	8000	2000	4 × AA	15	yes	Sensory	295 × 295	418 × 314 × 26
PORTACHESS III	CXG-233	2	–	yes	–	–	–	–	–	1 × 9V	250	yes	Sensory	31 × 81	190 × 105 × 28
SPHINX JUNIOR	CXG-237	–	yes	yes	–	Threat	–	–	–	4 × AA	500	–	Keyboard Entry	233 × 233	270 × 245 × 24
SPHINX DOMINATOR	CXG-239	Whole	yes	yes	yes	yes	LCD × 2	8000	2000	4 × AA	15	yes	Sensory	–	–
SPHINX ROYAL	CXG-240	yes	yes	yes	–	Threat	–	–	–	4 × AA	15	–	Sensory	–	–
ChessCard	CXG-241	–	yes	yes	–	Threat	–	–	–	1 × 3V	150	–	Keyboard Entry	–	95 × 58 × 6
CHESS 3000	CXG-3000	80	yes	yes	yes	yes	–	3000	–	–	–	Included	Auto-Response	290 × 290	335 × 335 × 50
CHESS 3008	CXG-3008	120	yes	yes	yes	yes	LCD × 2	6000	250	4 × AA	200	yes	Auto-Response	290 × 290	335 × 335 × 50
SPHINX COMMANDER	CXG-3018	240	yes	yes	yes	yes	LCD × 2	8000	2000	4 × AA	15	yes	Auto-Response	290 × 290	335 × 335 × 50
SPHINX 40+	CXG-3038	240	yes	yes	yes	yes	LCD × 2	8000	2000	4 × AA	15	yes	Auto-Response	320 × 320	395 × 395 × 64
SPHINX 50+	CXG-3048	Whole	yes	yes	yes	yes	LCD × 2	19529	–	5 × C	30	Included	Auto-Response	400 × 400	450 × 480 × 65

CXG Chess Reference Chart – Spring 1989

(Source: CXG Newcrest Technology Ltd. Hong Kong – Spring 1989) (photo copyright © by http://www.schaakcomputers.nl/) (600 dpi)

Release
- First appearance: April (?) 1982 (!)

Characteristics CXG Computachess I
- Sensor table model
- 16 Randleds
- 8 levels of playing strength
- Opening repertoire: approx. 50 ply (computer plays the most well-known book openings)
- Can perform the castling, captures en-passant and promote pawns
- Plays with white and black
- Position verification
- Take back: 2 ply
- Solves problems up to a mate in 2 moves
- Color can be switched during the game
- Audio feed-back (can be switched off)
- Save memory
- Runs for approx. 500 hours on 4 alkaline penlite batteries
- Adaptor: 9.0 DC (Pos. centre)

Playing strength
- Tournament level at 3 minutes per move (ELO/DWZ): ca. 1250

Technical specifications
- Microprocessor: 4-Bit Single chip
- Clock speed: 0,8 MHz
- Program size: 4 KB ROM
- Working memory: 256 Byte RAM

Programmer / Programmierer
- Mark Taylor & David Levy

Related chess computers with an identical chess program (clones)
- Computer Games Limited (CGL) Grandmaster Sensory 2 (table model)
- Computer Games Limited (CGL) Computachess II (table model)
- Computer Games Limited (CGL) Computachess Travel Sensory
- CXG Advanced Portachess (travel model CXG-201)
- CXG Computachess II (table model WA-002 & CXG-002)
- CXG Galaxy Mark II (table model CXG-011)
- CXG Portachess III (travel model released? CXG-233)
- Hanimex Computachess II (travel model HCG 1600)
- Hanimex Computachess III (table model HCG 1700)
- Multitech Computachess II (table model WA-002)
- Schneider Sensor Chessmaster MK 5 (table model)
- Unimex Schachcomputer II (table model)
- Unimex Chess II Portable SP 5003

On the weblink below you can replay a played game of Luuk Hofman
https://www.schaakcomputers.nl/schaakcomputers/chessx1.php?item=4&merk=CXG