HYPERTERMINAL SETUP

This instruction explains how to setup your MICROSOFT HyperTerminal*) connection for the connection of a PC compatible Novag chess computer to a PC. Please follow all the steps:

1. Connect the Novag chess computer to your PC using the cable that was delivered together with your chess computer. Please remember the comport you have used (e.g. COM1). Please also make sure that the chess computer is turned OFF during this procedure.

2. Start Hyper Terminal:
   a. Click on START
   b. Click on PROGRAMS
   c. Click on ACCESSORIES
   d. Click on COMMUNICATIONS
   e. Click on HYPERTERMINAL

3. A screen will pop up saying “NEW CONNECTION”:

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4. Give this connection a name such as NOVAG and click OK.

5. A screen will pop up saying “CONNECT TO”. Please chose under “CONNECT USING” the comport you have used to connect your chess computer to the PC (e.g. COM 1) and click OK.

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6. A new screen will pop up called “COM1 PROPERTIES”. Please make sure the settings are as follows:

- **BITS PER SECOND**: 57600
- **DATA BITS**: 8
- **PARITY**: NONE
- **STOP BITS**: 1
- **FLOW CONTROL**: NONE

Click APPLY and then OK.

7. Your HyperTerminal is now set up and ready to use.
Should you get the following ERROR message, please make sure that other interface programs such as Palm HotSync® are turned off:

8. Turn your chess computer ON, press NEW GAME on the chess computer or NG ENTER on your PC keyboard to begin.

® Microsoft Hyperterminal is a registered trademark of Microsoft Corporation. IBM is a registered trademark of IBM, Palm Hotsync is a registered trademark of IBM. Other product names mentioned in this document or on the NOVAG website, other than NOVAG may be trademarks or registered trademarks of their respective companies and are hereby acknowledged.
NOVAG CHESS COMPUTER TO PC PROTOCOL WITH MICROSOFT HYPERTERMINAL PROGRAM

This document demonstrates the serial communication protocol between a PC compatible Novag chess computer (e.g. Citrine, Star Diamond, Star Sapphire) and a PC (description of commands to be used for the communication between NOVAG CHESS COMPUTER and PC). As a communication interface the Microsoft HYPERTERMINAL® program can be used. We recommend reading this document in its entirety prior to connecting the NOVAG CHESS COMPUTER to an IBM compatible PC.

In this document we have listed various commands, which make use of the following conventions:

- Any letter with **bold type** represents input by the user and will not be echoed by the NOVAG CHESS COMPUTER.
- Any letter with normal type represents response by the NOVAG CHESS COMPUTER.

The command descriptions are listed in alphabetical order.

Should you have any questions regarding the information contained in this document then please feel free to e-mail us at: sales@novag.com or fax us at +852-2810 8177.

A. COMMUNICATION PROTOCOL

The communications are RS232 based and use the values of 57600 Baud, 8 Data Bits, 1 Stop Bit, No. Parity and no flow control.

B. COMMAND DESCRIPTIONS

1. **Autoclock : A, A ON, A OFF**
   Display the current autoclock status or set the autoclock feature on or set the autoclock feature off. When the autoclock feature is set on, the black and white clock will be displayed after 1 complete move is made.

   - N
   - New Game
   - X on
   - Xmit on
   - A on
   - Autoclock on
   - M e2e4
   - M 1 e2-e4 |
   - M 1, e7-e5 |
   - Clock 00:00:00 00:00:01

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2. **Clock : C**
Display the current white and black time.

C
Clock 00:06:27 00:00:01

3. **Flip : F**
Flip NOVAG CHESS COMPUTER white move from the top of the chessboard when at new game position.

N
New Game
F
Flip

Flip color to move from white to black or from black to white.

M 1 e2-e4 |
M 1, e7-e5 |
F
Flip --> Black

4. **Game : G**
Display game move list.

G
Game 2
. white  black
. 1 e2-e4  c7-c5
. 2 Ng1-f3  d7-d6

5. **Human mode : H**
Display the board format, move format, information format and game format in human mode.

H
Human Mode

P
Position Board
.  aa bb cc dd ee ff gg hh
.8  br bn bb bq bk bb bn br 8
.7  bp bp  :: bp bp bp bp 7
.6  ::  :: bp  ::  6
.5  :: bp  ::  ::  5
.4  ::  :: WP  ::  4
.3  ::  :: WN  ::  3
.2  WP WP WP WP :: WP WP WP 2
.1  WR WN WB WQ WK WB  WR 1+
.  aa bb cc dd ee ff gg hh

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Video Mode

Position Board
.8rnbqkbnr
.7pp pppp
.6 p
.5 p
.4 P
.3 N
.2PPPP PPP
.1RNBQKB R+

6. **Chess ID : I**
Display the NOVAG CHESS COMPUTER chess ID.

ID. H8S/NOVAG CHESS COMPUTER V1.01

7. **Go : J**
This command acts as a go key function. Please refer to the user manual for different go key operations of various functions.

New Game

M 1  d2-d4 |
J
M 1, d7-d5 |
8. **Key function : K00,..., K77; KA0,...KA7; KB0,...KB7; KC0,..., KC7**

This command allows the user to operate any NOVAG CHESS COMPUTER chessboard square or keyboard key from the PC by typing in Kxx. Whereby Kxx :- **ChessBoard squares K00-K77**

Every square of the 8x8 chessboard square has assigned a unique key code.

*Upper left corner chessboard key : 00 (A8 square )- Lower right corner chessboard key : 77 (H1 square)*

<table>
<thead>
<tr>
<th>00</th>
<th>01</th>
<th>02</th>
<th>03</th>
<th>04</th>
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<td>76</td>
<td>77</td>
</tr>
</tbody>
</table>

**KeyBoard keys KA0,...KA7; KB0,...KB7; KC0,..., KC7**

<table>
<thead>
<tr>
<th>KEY</th>
<th>key code (Kxx)</th>
</tr>
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<tbody>
<tr>
<td>Referee</td>
<td>A0</td>
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<tr>
<td>Sound</td>
<td>A1</td>
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<tr>
<td>Book Select</td>
<td>A2</td>
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<tr>
<td>Restore</td>
<td>A3</td>
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<tr>
<td>Random</td>
<td>A4</td>
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<tr>
<td>Easy</td>
<td>A5</td>
</tr>
<tr>
<td>Trace Forward</td>
<td>A6</td>
</tr>
<tr>
<td>Next Best</td>
<td>A7</td>
</tr>
<tr>
<td>SaveGame</td>
<td>B0</td>
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<tr>
<td>LoadGame</td>
<td>B1</td>
</tr>
<tr>
<td>Pro-op Save</td>
<td>B2</td>
</tr>
<tr>
<td>Pro-op Delete</td>
<td>B3</td>
</tr>
<tr>
<td>Pro-op Priority</td>
<td>B4</td>
</tr>
<tr>
<td>Pro-Print</td>
<td>B5</td>
</tr>
<tr>
<td>Verify-Setup</td>
<td>B6</td>
</tr>
<tr>
<td>Color</td>
<td>B7</td>
</tr>
<tr>
<td>NewGame</td>
<td>C0</td>
</tr>
<tr>
<td>Clear</td>
<td>C1</td>
</tr>
<tr>
<td>SetLevel</td>
<td>C2</td>
</tr>
<tr>
<td>Option1/2</td>
<td>C3</td>
</tr>
<tr>
<td>Training</td>
<td>C4</td>
</tr>
<tr>
<td>Hint</td>
<td>C5</td>
</tr>
<tr>
<td>Info</td>
<td>C6</td>
</tr>
<tr>
<td>Go</td>
<td>C7</td>
</tr>
</tbody>
</table>

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9. **Level : L, L +NOVAG CHESS COMPUTER5, L –TR1,**
Display the current play level or set the play level for different color.

L  (display current play level for white & black)
Level + tr 1
Level - tr 1

**L NOVAG CHESS COMPUTER 5**  (set play level NOVAG CHESS COMPUTER5 for both white and black color)
Level + NOVAG CHESS COMPUTER 5
Level - NOVAG CHESS COMPUTER 5

**L –NOVAG CHESS COMPUTER3**  (set play level NOVAG CHESS COMPUTER3 for black)
Level + NOVAG CHESS COMPUTER 5
Level - NOVAG CHESS COMPUTER 3

Note: Set level for white will always set the black level at the same level as the white level. Set level for black will not affect the level setting of white.

10. **Move : M e2e4**
Make move from PC.

N
New Game
ME2E4
M  1  e2-e4  |
M  1,  d7-d6  |

Note: When making a pawn move to the 8th row, the valid promote piece type (/N,/B,/R,/Q) must be entered, otherwise promote to queen is taken as default.

11. **New Game : N**
Start a new game.

N
New Game

12. **Origin : O**
Reset the game to the origin starting position.

13. **Position : P**
To display the current board position or set up the board position.

N
New Game
pcpa2ka1bkh8-
pcpa2ka1bkh8-

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P
Position Board
   aa bb cc dd ee ff gg hh
  .8 :: :: :: :: bk 8
  .7 :: :: :: :: 7
  .6 :: :: :: :: 6
  .5 :: :: :: :: 5
  .4 :: :: :: :: 4
  .3 :: :: :: :: 3
  .2 WP :: :: :: 2
  .1 WK :: :: :: 1-
   aa bb cc dd ee ff gg hh

Note: abb. used
  c = board clear
  p = pawn
  n = knight
  b = bishop if follow a valid board sq or b = black color if follow a valid chess piece type
  q = queen
  k = king
  + = white move at start
  - = black move at start

14. Replay: R
To restore the game to the starting position & replay the whole game.

R
Replay  2
M 1 e2-e4
M 1, e7-e5
15. **Sendinfo : S, S1...,S4**
   To display the current send info setting or set the send info level.

N
New Game
S 4
Send Info 4
M E2E4
m 1 e2-e4
. = d 01 00.00 00:00:01 Book
m 1 e7-e5
M H2H4
m 2 h2-h4
. d 03 00.57 00:00:01 28/29 482/s d7-d5 d1-h5 b8-c6
.+ d 03 00.57 00:00:01 0/29 274/s d7-d5 d1-h5 b8-c6
. d 04 00.19 00:00:01 28/29 466/s d7-d5 d1-h5 b8-c6 f1-b5
.> d 04 00.23 00:00:01 27/29 256/s g8-f6
. d 04 00.42 00:00:01 27/29 418/s g8-f6 g1-f3 d7-d5 b1-c3
.+ d 04 00.42 00:00:01 0/29 496/s g8-f6 g1-f3 d7-d5 b1-c3
. d 05 00.69 00:00:02 28/29 4332/s g8-f6 b1-c3 d7-d5 e4-d5 f6-d5
.+ d 05 00.69 00:00:03 0/29 5798/s g8-f6 b1-c3 d7-d5 e4-d5 f6-d5
. d 06 00.50 00:00:06 28/29 6005/s g8-f6 b1-c3 d7-d5 e4-d5 f6-d5 c3-e4
.+ d 06 00.50 00:00:10 0/29 4340/s g8-f6 b1-c3 d7-d5 e4-d5 f6-d5 c3-e4
. d 07 00.65 00:00:19 28/29 5252/s g8-f6 b1-c3 d7-d5 e4-d5 f6-d5 f1-c4

**Note:** *Sendinfo* can only be valid while in **Human** mode

16. **Takeback : T**
   To take back move.

T
t 2 g8-f6

17. **Referee : U, U ON, U OFF**
   To display current referee mode and setting referee mode on or off.

U
 .Referee off
U ON
 .Referee on
U OFF
 .Referee off

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18. **Xmit : X, X ON, X OFF**
To display current transmission setting and setting the transmission on or off.

X
Xmit off
X ON
Xmit on
X OFF
Xmit off

**Note:** The Xmit must be set **on** while interfacing the NOVAG CHESS COMPUTER with a PC, otherwise no move data will be transmitted by the NOVAG CHESS COMPUTER.

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