2.e - Technical information

The bottom of the secondary screen is used to display detailed information of the programs thought processes. This information can provide a great insight into how a good chess program works, but only takes a fraction of one percent of the programs thinking time to display it.

2.e.i - Lookahead

When the program thinks about its move, it displays the lookahead depth of its search. The depth is printed in 'ply' or 'half-moves'. The program will search most move sequences to at least this depth, with some being searched much deeper.

2.e.ii - Positions examined

The number of positions examined in the tree of move sequences is displayed. This number is updated at every position and in fact takes very little time because of the single-byte/character type of display. The program examines on average about 300 positions per second in the middlegame.

2.e.iii - Best line

The program displays the best line it has found so far in its search. This can provide you with the usual 'hint' move and also an analysis of the game in the next few moves beyond the 'hint'! (Usually the line will contain a 'null' move. This simply means a passive, non-capturing move has been assumed.) Also displayed is the evaluation of the best-line, as two numbers. The first is the material evaluation (in terms of number of pawns up or down), the second the positional evaluation. A positive number means the program is better, a negative number means the opponent is better. If the best-line is found to lead to a checkmate then the material score will be set to plus or minus 62 with the positional score a measure of how many moves to the checkmate.

2.e.iv - Current line

The move sequence the program is currently considering is displayed. This can be seen to change as the search progresses. The length of the line shown, can be adjusted as required (for further details see the 'Quantify' command described later).

2.e.v - Assumed move

Colossus thinks on its opponents time. It assumes the opponent will make a particular move and then continues thinking about its next move. Sometimes the program will not have a move to assume and then will not think ahead. The move assumed is displayed so that you can follow the programs thought processes and to provide a 'hint' move. However, the quality of this move is