

# PROTEC 21 Frequently Asked Questions

## General

***When used in "Live" data collection mode, Protec 21 analyses only betting strategy. Isn't playing strategy important?***

In order to systematically win at Blackjack, a player must employ several tactics - namely, a betting strategy and a playing strategy. A typical house edge of 0.5% assumes a sensible playing strategy is in use - namely "basic strategy" or better. Basic strategy is the set of playing decisions which gives the best possible outcome without knowing the makeup of the shoe. Playing worse than basic strategy increases the casino's advantage against the player. Playing better than basic strategy involves using some sort of counting system in order to adjust playing decisions based upon the makeup of the shoe. For example, a player who knows a shoe is depleted in high cards might 'hit' under certain circumstances, even though basic strategy says to 'stand'.

However, someone who is playing perfect strategy and using a counting system to take the makeup of the shoe into consideration, but not varying their wager size in accordance with the fluctuating advantage, does not have a long-term winning strategy - the casino still retains the advantage. In other words, perfect playing strategy alone is not a winning game for a player. In order to actually nudge the long-term advantage into the player's favour, a player must vary the wager amount according to the makeup of the shoe. This means placing small (or no) bets when the makeup of the shoe is unfavourable to the player, and large bets when the cards tend to favour the player. Utilising such a betting strategy, a player can adopt a long-term winning strategy against the casino- *even if no playing variations from basic strategy are being employed.*

**Protec 21** employs two basic principles:

- Players who have a winning betting strategy also know how to play at least basic strategy. Learning basic strategy is quite simple and many people play according to basic strategy, even without employing a winning betting strategy. Those players who go on to learn a counting system invariably know at least basic strategy.
- Entering playing strategy data is very tedious and error-prone, whereas entering betting strategy data alone is relatively simple and can be performed by operators in real time with minimal training. Unlike entering playing strategy, inputting cards out of order does not affect the analysis at all, and missing a card occasionally will have a negligible effect on the outcome.

The result is an accurate determination of the player's threat to the house bankroll, which can be carried out easily and in real time.

## Data Collection Module

***What if I don't select the correct rule set when starting a data collection session?***

Failure to select the correct rule set could distort report statistics. This is because (1) the house edge is probably different for each rule set, and (2) the number of decks used in the game is probably different. For example, assume one deck has been played and the running count is +8. This equates to a true count of +4 in a two-deck game, but just over +1 in an eight-deck game.

Additionally, when using the archive-mode data collection module, the rule set is used to determine which actions are allowable at any given stage of game play.

***What if a suspect plays two or more boxes, or back-bets another player's box?***

Mentally sum each bet wagered and insert the total figure into the bet field.

***What if a suspect moves from table to table?***

Either before or after bringing up the new table onto the video monitor, say "Change Table" and select the rule set in use at the new table (if it's a different rule set) from the drop down menu.

***What if I miss a few cards, or get the bet wrong?***

Using Live data collection mode, omitting or mis-entering the occasional card or bet will not alter the final analysis greatly provided sufficient data has been entered.

***Why enter just the initial bet, and not any subsequent bet increases like splitting or doubling?***

Skilful players place their initial bet based upon the current advantage. They then play according to memorised rules (such as basic strategy, or basic strategy coupled with index variations). When players split or double down (and therefore increase the amount wagered), this is only a result of following the rules according to the cards they were dealt - it is not a conscious decision by the player to increase their bet.

In other words, the decisions made during the course of the game (the playing strategy) are "dictated" by the rules. The only decision which is entirely up to the player is how much to wager at the start of a round (the betting strategy). Protec 21 analyses exactly how accurately the player's betting strategy correlates with the fluctuating advantage.

***How do I indicate Win/Lose/Tie for a player who has split or is playing multiple boxes?***

Enter the result which is most consistent with the outcome. For example, if a player plays two boxes, winning one and losing one, enter Tie. If a player plays three boxes, winning two and losing one, enter Win.

***Why don't the Win/Lose/Tie results have to be accurate?***

These indicate the end of a round and this result does not influence the player analysis report. Over a small sample of, say, two to four shoes, the win/loss result is not indicative of a skilful player. Players employing long-term winning strategies must play dozens or hundreds of shoes in order to overcome short-term statistical fluctuations. Contrast this with analysing the betting strategy over the same small sample of data (two to four shoes) which is indeed sufficient to determine the player's level of skill.