Blackjack Mentor and Blackjack Counter

User's Guide

Version 2.2

DeepNet Technologies

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1. Introduction

Both *Blackjack Mentor* and *Blackjack Counter* can be downloaded from the DeepNet Technologies web site: www.deepnettech.com. If you have specific questions, feel free to e-mail us at info@deepnettech.com.

This manual includes documentation for both products. You can skip the card counting *Blackjack Counter* section if you are only using *Blackjack Mentor*.

New Book from DeepNet: **Blackjack Count Master**

DeepNet is proud to announce to a new blackjack training book: Blackjack Count Master. This book takes off where this manual ends… a **complete** training system, including 15 exercises that guide you through every step of learning to become an expert card counter. Each exercise has instructions on how to setup *Blackjack Counter* and/or *Expert*, and includes detailed pass/fail metrics so you'll know when to move on to the next stage. Everything is covered, from Basic Strategy, tracking the count, betting, and even advanced index plays. For more information, please visit our web site:

http:/www.deepnettech.com/cmbook.html

You get over 100 pages of guidance that details everything you need to become an expert card counter:

- 15 targeted exercises with BJ Counter/Expert including specific pass/fail metrics.

- Detailed analysis of common and rarely discussed pitfalls that beginners and experts alike often make.

- Designed to be used with any count system, from unbalanced Knock-Out to balanced High-Low.

- Bonus analysis chapters on 'Double Deck Blackjack' and 'Knock-Out versus High-Low'.

- Practical advice on 'Playing for Real' in the casinos... transferring your skills to actual successful play at the tables.

- Learn how to 'Fine Tune your Game' with valuable guidance about bankrolls, the affect of different rules, bet spreads, and hand spreading.

If you're serious about winning at blackjack, purchasing *Blackjack Count Master* is the perfect training system regardless of the count system you use.

New Software from DeepNet

DeepNet Technologies is committed to developing the very best Blackjack training products for Palm OS, Pocket PC, and Microsoft Windows. We are always working on new products… visit our web site for the latest releases!

Blackjack Expert is a game simulator and testing tool combined in one easy-to-use program. As you play against the computer, your decisions are tested for correctness: actions, index plays, bet sizes, and insurance. The software comes with advanced casino

options not seen in other Blackjack programs: splitting, number of decks, insurance, doubling after splits, dealer hits/stand on soft 17, ace re-splitting, and doubling limits. Whether you're just looking for a great Blackjack game or looking to learn or practice Card Counting techniques, Blackjack Expert is the fastest way to improve your game.

Blackjack Counter Supplementary Databases…Get the most out of value *Blackjack Counter* by purchasing the very latest action tables and count systems! Although *Blackjack Counter* comes with a good set of beginner count systems, these supplementary databases will make sure you are at the top of your game. Each supplementary database includes detailed documentation on the systems and tables (in Acrobat PDF format), plus full Blackjack Audit analysis reports showing the expectation and other valuable statistical information about the system. Exhaustive 'Risk of Ruin' (ROR) simulations are included with each count system, telling exactly how much money you should make, and 5%-10% ROR bank roll requirements.

Blackjack Audit is a powerful Blackjack Simulator that will help you analyze every aspect of your game. This power-packed analysis tool runs millions of hands of Blackjack, building detailed statistical data to tell you how well your count system is working, and how to make it better. If you're serious about winning at Blackjack, you'll want to use *Blackjack Audit* to fine-tune the details of your game.

1.1. What is Blackjack Mentor?

Blackjack Mentor is a Palm Pilot instructional program designed to help you become a more proficient Blackjack player. It is not a game: it is a teaching aide to help you learn perfect Blackjack Strategy.

The program comes with three easy-to-use modes that teach you the Basic Strategy tables quickly. Drill mode tests you on the 300 challenging hand combinations, remembers your mistakes, and stresses the plays that you fail frequently. You can view the complete strategy matrix in Table mode. And Memorize mode lets you walk through the strategy table and respond with the correct plays.

Blackjack Mentor comes programmed with many popular strategy tables for different casino rules and numbers of decks. You can select from any of the default Action tables, or you can create and save your own!

Blackjack Mentor on PDA mobile platforms is the best way to hone your Blackjack skills. Practice your skills no matter where you are!

New from DeepNet… Blackjack Mentor is now available for Microsoft Windows. This new version has every feature of the Palm OS product. Now you can hone your Blackjack skills on the road and at home! Visit our web site to download a free shareware version: www.deepnettech.com/bjmwin.html.

1.2. What is Blackjack Counter?

Blackjack Counter has every feature of *Blackjack Mentor*, but also includes powerful card counting features and test modes. Once you have memorized Basic Strategy, *Blackjack Counter* is the best way to get an edge over the casinos by learning card counting disciplines.

Are you worried that card counting will take too long, or requires genius memory skills? Relax… *Blackjack Counter* is designed for **beginners** and experts alike! Card counting is

much simpler than you might think, and is quickly mastered with the superior drills and tests in *Blackjack Counter*.

The program comes preprogrammed with many popular card counting systems, ranging from Arnold Snyder's "Red 7" (a very powerful unbalanced count system), to a variation of Stanford Wong's "High-Low" (the easiest and most popular true count system). Modify any of the existing systems, or enter a completely new system if your favorite is not listed!

Although *Blackjack Counter* is designed for ease of use, it has powerful features for the most discerning player. Every aspect of a count system can be specified: card values, run or true counts, IRCs, insurance pivots, bet ramps, and indices for play deviations. Both balanced and unbalanced systems are supported.

The program includes a Count mode that lets you practice counting down decks. You can test displayed count or run count, number of decks, penetration, and bet sizes. Count mode can even deal out the cards in real hands, simulating a more realistic casino environment!

Practice your knowledge of the count system play indices in Drill mode. Select the correct action based on the displayed count.

Now you can learn count systems that actually give you a 0.5% to 2% edge over the casino! With *Blackjack Counter*, you can begin mastering card counting techniques that were formerly restricted to dedicated experts who had the time to learn them by hand.

New from DeepNet… *Blackjack Counter* is now available for Microsoft Windows. This new version has every feature of the Palm OS product. Now you can hone your Blackjack skills on the road and at home! Visit our web site to download a free shareware version: www.deepnettech.com/bjccwin.html.

1.3.   What is Speed Count?

Speed Count is the easiest card counting system ever invented, yet delivers a great positive player edge in all standard casino blackjack games. Speed Count was developed by the makers of this program, DeepNet Techologies (www.deepnettech.com) The web site for Speed Count is www.GoldenTouchBlackjack.com, where you learn about the Golden Touch blackjack courses and books.

Speed Count takes only an hour to master and play perfectly… it's that simple. While not as powerful as more complex systems such as High-Low, it still generates a fantastic positive player edge, typically 50% or more of the same performance based on equal bankroll risk. An advanced system like High-Low can take 40 to 80 hours to master, and you still may be playing with enough errors that your actual earning rate is much lower than it should be, or even negative. Speed Count is so simple to learn, you can concentrate on camouflage, or just sit back and relax and enjoy playing for a change!

The basic "Speed Count Regular" count system is included in *Blackjack Counter* for free. But the complete system, which includes the Optimal Basic Strategy play tables, surrender index sets, and complete training guide and instructions, is available as an add-on database to *Blackjack Counter*. You can purchase by clicking this link: www.deepnettech.com/bjccdbs.html#speedcount

How does Speed Count work?

This is only a **very brief** introduction to Speed Count. For the full details, you need to purchase the add-on database above, or the "Golden Touch Blackjack Revolution!" book by Frank Scoblete, or both!

Start at the indicated IRC for the system, and number of decks. Add +1 for each 2, 3, 4, 5 or 6 you see. Do **NOTHING** to the count for any other card! Subtract one at the end of the round for each played hand, including the dealer's. Don't forget this includes split hands too as a new hand. If you think about this, what we are doing is increasing the count when there is more than one 'small card' per played hand, and decreasing it when there is a deficit.

When the count hits 31 or higher, you have a positive edge, and the bet ramp indicates to increase your bet accordingly.

While you can use traditional basic strategy with Speed Count, the add-on database and book details the Optimal Basic Strategy (OBS), a modified set of action tables for Speed Counters. When you are card counting and varying your bets, there is an improved basic strategy to earn you more money. This is a replacement for index plays, which are cumbersome and hard to learn (and encourage dangerous player errors). Speed Count does not use index plays, and instead uses an OBS tailored specifically for Speed Count and corresponding matching blackjack games.

1.4.   Using this Guide

This guide does not require you to be a Blackjack expert, but you should be familiar with the game and the rules. Even if you have never heard of or used Basic Strategy or card counting systems, you will be able to utilize this software and improve your game. If you already are familiar with advanced Blackjack concepts, then this software will help you hone and practice your skills, no matter what level you have attained.

Many superb books and web sites are available to provide further help with Blackjack. See the section *Further Reading* at the end of this guide for more information.

1.5.   Blackjack - Rules of the Game

Read this section if you want a refresher course on the rules of Blackjack.

Object of the Game

The player attempts to beat the house, represented by the dealer, by obtaining a hand total that is equal to or less than 21 so that his total is higher than the sum of the dealer's two cards.

Card Values

Each card has the same value as its index except for the ace and the face cards. All 10's and face cards are counted as 10. The ace can be valued as either 1 or 11, at the option of the player. The suits have no relevance in blackjack.

Number of Players

The game has one dealer and usually from one to seven players.

Number of Decks

Generally from one to eight decks are used. Single and double deck games are dealt by hand. When more than 2 decks are used, a device called a card shoe is used to hold the undealt cards.

Blackjacks

When a player is dealt an ace and a 10-valued card as his first two cards, it is called a "blackjack" or "natural" and generally is paid one and one-half times his original bet. If the player and the dealer both have blackjacks, the player pushes and no money is won or lost.

The Deal

Each player is dealt two cards in sequence, one at a time, either face up or face down, depending on the house rules, in a clockwise direction. The dealer also receives two cards, one face up and one face down.

Player's Action

If it has not been determined that the dealer has a blackjack, the players are allowed to take certain actions on their hands.

If the player wants another card, he can inform the dealer for a hit. In a face up game where the players do not touch the cards, the player does this by scratching the surface of the felt with his finger(s). In a face down game where the players hold their initial two cards, the player would use his cards to scratch the felt. The player may take as many hits as he wants as long as he doesn't "bust".

If the player does not want anymore cards he should inform the dealer that he wishes to stand. In a face up game the player does this by waving his hand in a lateral motion with palm down. In a face down game the player would tuck his first two cards under his bet.

A player may double the amount of his initial bet after looking at his first two cards. This is referred to as doubling down and once this is done the player receives one additional card only. In face up games the player informs the dealer that he wishes to double down by placing an additional bet equal to his initial bet in the betting circle and announces "double down". In a face down game the player would also turn his first two cards over. The dealer would then deal one card to the player (face up in a face up game, face down in a face down game) and then move on to the next hand. Many casinos place restrictions on when a player may double down. Some casinos only allow doubling down on hand values of 10 or 11, some do not allow doubling down on soft hands, some do not allow doubling down after splitting. The less restrictions placed on doubling down, the more advantageous it is for the players.

If a player's initial two cards are identical in value, he may split them by betting an amount equal to his original bet on the second card. He then draws additional cards on each of the split pairs, playing each hand (from his right to his left) in turn. Most casinos place a limit on the number of times a hand may be split, usually from 1 to 3. When aces are split, a player is normally permitted to draw only one additional card on each ace.

Some casinos allow the player to surrender his first two cards. When a player surrenders his hand, he immediately gives up half his bet without playing his hand out. On early surrender, the player gives up half his bet regardless of whether the dealer has a

blackjack or not. On late surrender if the dealer has a blackjack the player loses his entire bet.

Busting

If a player's hand ever exceeds a total of 21, he has busted and loses the hand regardless of the dealer's total. When a player busts, his cards and his bet are immediately collected by the dealer.

Push

If a player and the dealer have the same total, and this same total is 21 or under, the hand is a tie, or a push and no money is won or lost. The only exception to this rule is that a blackjack always beats a hand value of 21.

Dealer's Play

Once all the players have acted on their hands, the dealer flips his unexposed (hole) card over and draws cards until he has a total of 17 or above. Some casinos require the dealer to also hit soft 17s, which is to the player's disadvantage.

Insurance

When the dealer's exposed card (upcard) is an ace, the players are allowed to make an insurance bet equal to half of the amount of their initial bet. If the dealer has a blackjack, the players will be paid at 2-to-1 on their insurance bet. If the dealer does not have a blackjack, the insurance bet is lost.

1.6.   Blackjack - Basic Strategy

For any given player hand and dealer up card, there is an optimal strategy: the action that will yield you the most earnings (or least losses) statistically. Basic Blackjack Strategy dictates the best action for a combination played directly off the top of the shoe, with no knowledge of other dealt cards (i.e. no card counting).

Under these constraints, there are about 300 critical plays to be memorized in Blackjack: 27 two-card player hands times 10 dealer up cards (2 to 9, tens, and ace). The player hands are hard 8 to 16 (9), soft 13 to soft 20 (8), and pairs (10). Hard hands less than 8 are always hit, and you always stand on hard hands over 16.

The best strategy depends on the number of decks in the shoe and the casino rules. Variants such as 'double after splits' (DAS), dealer hits soft 17, and surrender change the basic strategy actions. Hence, different *Action Tables* are available in the program for different Blackjack casino variants.

Using perfect Basic Strategy all the time will minimize the casino's margin of profit to as low as 0.5%. Players who don't use basic strategy are giving up as much as 5 or 10% of their money to the house!

The first, and easiest, step to becoming a winning Blackjack player is to memorize basic strategy and play it perfectly. Once you have done this, you can begin learning card counting techniques with *Blackjack Counter*.

Note that all basic strategies, regardless of the rules or game variants, recommend against insurance. Don't accept insurance when playing basic strategy!

1.7.   Blackjack - Rule Variants

Casinos have subtle variations in their Blackjack rules that can dramatically alter your winnings or losses. The following summarizes some of the most common variants and their affect on your winnings (the baseline is single deck, double down on any two first cards, one card on split aces, dealer stands on soft 17, no surrender. This variant is known as "Las Vegas Strip", and only gives the casino a 0.02% advantage).

Rule	% Effect (+ve is better for the player)
Two decks	-0.32%
Four decks	-0.48%
Six Decks	-0.53%
Eight Decks	-0.55%
Dealer wins ties	-9.34%
Natural pays 1 to 1	-2.32%
Natural pays 2 to 1	+2.32%
Dealer hits soft 17 (H17)	-0.20%
No resplitting of any pairs	-0.03%
Resplitting of aces	+0.06%
No soft doubling	-0.11%
Double down only on 10 or 11 (Dbl10-11)	-0.21%
Double down only on 11 (Dbl11)	-0.69%
Double down on any number of cards	+0.24%
Double down after pair splitting (DAS)	+0.13%
Late surrender	+0.06%
Early surrender	+0.62%

Obviously, you want to avoid casinos that have unfavorable variants (such as Dbl10-11). To compute your expectation, simply sum the variants involved. For example a common multi-deck game is: 8 deck, DAS, H17. This has an expectation of: -.02 (baseline) + -0.55 (8 deck) + -0.20 (H17) + 0.13 (DAS) = 0.6%. Of course, this assumes you are playing perfect basic strategy!

1.8. Blackjack - Card Counting

Contrary to popular belief, counting cards in Blackjack does **not** mean remembering every single card that has been played! The reality is that any player who is willing to spend a few hours practicing with a program like *Blackjack Counter*, can master card counting techniques.

Card Values

All popular card counting systems start by assigning values to each of the ten card denominations (2 through 9, ten/faces and aces). The basic idea of any system is to keep a running total of the cards that have been played. The current count indicates whether

the game is in the casino's favor or the player's favor and by how much. Depending on the count, players vary their bet sizes and make play deviations from basic strategy. That's it!

The card values determine whether a count system is balanced or unbalanced. A balanced system values a complete 52-card deck at zero. A system that does otherwise is said to be unbalanced. Unbalanced systems tend to be a bit simpler in that they do not use the *True Count.*

Generally, count systems are designed such that a positive increase in the count indicates an advantage for the player, and a decrease means a benefit to the house. This is accomplished typically by assigned negative values to high rank cards (tens and aces), and positive values to low ranks (2 to 7). Value assignments vary widely, but they all result in the same basic effect: increasing count is good for the player!

This works since the player stands a better chance of winning a hand when there are more tens and aces in the shoe. Although the player and dealer are equally likely of getting a Blackjack, the player is paid at 3 to 2. Combined with the fact that the dealer is more likely to bust since they cannot choose when to stand, you have a more favorable situation for the player.

Running Count

The running count is simply the sum total of the count values for all cards that have been played. The best way to learn to keep track of the running count is to use the Count mode in *Blackjack Counter*. Experts recommend that you should be able to count down a 52-card deck in less than one minute (allowing some time to tap on the buttons!).

True Count

Some systems require you to keep track of the True count. The true count is the running count divided by the number of decks not yet played. Here are some examples:

Running count	Decks remaining	True count
+7	7	+1
2	1	+2
-4	0.5	-8
-8	4	-2

Notice that as the number of decks falls below one, the magnitude of the count increases. This typically only happens in single deck games, since the 'cut card' in multi-deck games is usually beyond one deck.

Keeping track of the true count requires visual inspection of the discard tray and some rough calculations. Unbalanced systems avoid the complexity of keeping track of the true count by starting the count at a low value, and setting the card values such that the count will increase over time (more positive values than negative).

Bet Sizes

Each system will have count ranges that indicate that the player has an advantage over the house. Once the count reaches these numbers, it's time to increase the wager. The betting range a system recommends typically depends on the number of decks. It can be anywhere from 1 to 3, to 1 to 15.

Insurance

Insurance can be beneficial to the player if the count is sufficiently high, since the dealer is more apt to have a Blackjack. Each system will have a count total at which to accept insurance. This number may depend on the number of decks.

Indices

The last thing a count system may provide is a list of play deviations from the basic strategy, depending on the count. An index value for a play combination indicates what alternative play to make when the count reaches (or goes below) that value.

2. Blackjack Mentor

This section is designed to introduce you to the features of *Blackjack Mentor*. For detailed information, tap on the 🛈 icon in any mode, or any dialog. Additional help is available from the 'Help' menu.

All of the information in this section applies to *Blackjack Counter* as well, since it is a superset of *Blackjack Mentor*.

2.1.   Common Features

Switching Modes

Blackjack Mentor has 4 modes that you can use. These modes are accessed by tapping on the buttons along the top right of the window. Your choices are **D** (drill), **T** (table), **M** (memorize), and **A** (action). The **C** (count) and **I** (index) buttons are for *Blackjack Counter* only, and will display an information dialog for that product in *Blackjack Mentor*.


Figure 1: *Mode buttons*

Getting Help

Each mode has customized online help available by tapping on the 🛈 icon in the top right corner of the display. Also, most dialogs have the same icon in the top right that you can click on to get detailed assistance. Lastly, there is additional information available in the 'Help' menu for the product; access it by tapping on the 'Menu' icon in the lower left of the silk screen.

2.2. Using Drill Mode
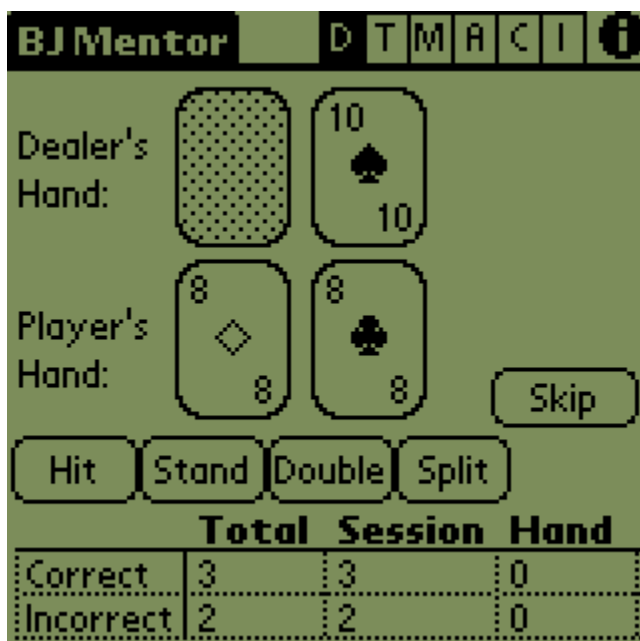
Figure 2: *Drill mode*

Drill mode is used to test you with random hand combinations. The screen displays two dealt cards for the player in the lower half, and one card for the dealer. Buttons are displayed along the bottom of the screen for the play choices available to you; tap on the correct action for this hand combination.

You may switch to another mode and return if you wish. If you want to display another hand without specifying the action for this play combination, tap on the 'Skip' button.

The more you guess incorrectly for a play combination, the more you will be asked about it. You can turn off specific tests in *Table Mode*.

When you guess incorrectly, a dialog is displayed showing you the correct action. The complete table line for this player combination is displayed to help you memorize the correct action.

Player Statistics

The table along the bottom of the screen displays the player statistics.

The 'Total' column shows the total number of correct and incorrect plays made for all hand combinations. This is remembered even when you switch away to a different Palm application and return later.

The 'Session' column shows how many incorrect and correct guesses you have made for this run session. This column is reset when you switch away to a different Palm application.

The 'Hand' column shows how many correct and incorrect guesses you have made for this specific play combination.

2.3. Table Mode

Figure 3: *Table mode*

Table mode displays the strategy entries for each play combination. The three buttons along the bottom left control which part of the play table is displayed: **H** (hard hands), **S** (soft hands), and **P** (pairs). The hard hand pane displays hands with a count from 8 to 16, the soft hands are Ace-two to Ace-nine, and the pairs pane lists Ace-Ace to Ten-Ten.

You can select any cell in the play table. A small 'x' is displayed in the top right of a cell to indicate that you have guessed that play combination incorrectly. Selecting the cell will display the number of correct and incorrect guesses along the middle-bottom of the screen.

The 'Test' checkbox can be used to turn off or on any individual play combination in Drill mode. When unchecked, the play will never be displayed in Drill mode. You can clear or set all of the Test checkboxes from the *Preferences* dialog. Using the Test checkbox while the 'Hand' column value is selected will disable or enable the whole row.

The strategy plays displayed depend on the 'Use action table' option in the *Preferences* dialog. If this option is unchecked, then the built-in matrix is displayed. Otherwise, the plays from the currently select Action table are displayed.
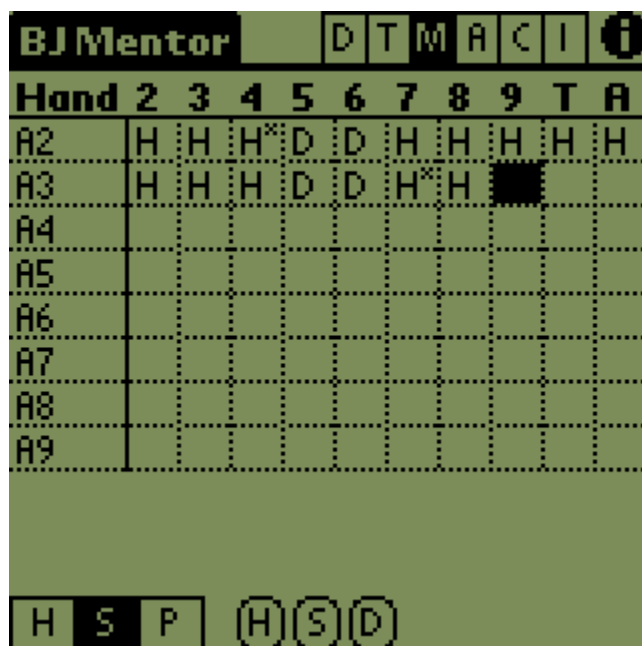
2.4. Memorize Mode

Figure 4: *Memorize mode*

Memorize mode lets you walk through the strategy table in sequence and tests your memory of the correct actions. Tap on a cell, then click on the correct action button along the bottom of the screen (**H** for hit, **S** for stand, **D** for double, **P** for split, and **U** for surrender). Once you specify an action, you are moved to the next cell to the right or down. Select the play pane with the buttons in the lower left of the Screen (*H*ard, *S*oft or *P*airs).

If you guess incorrectly, a dialog is displayed indicating the correct play. An 'x' is displayed in the top right corner of a cell if you guessed incorrectly.

To restart the memorization test, switch away from this mode and return. The table will be cleared and you can begin again.

2.5. Action Mode

Basic strategy for Blackjack varies depending on the number of decks and the rule variants in play. The default strategy table that *Blackjack Mentor* starts with is for 8 decks, double on splits allowed (DAS), and dealer hits soft 17 (H17). In the *Preferences* dialog, you can specify noDAS, and Allow surrender. These two preferences are only used when the 'Use action table' option is **not** set (i.e. the built-in action table is used).

You can use different strategy matrices beyond the hard coded built-in table. The Action mode lets you select from different tables, or create your own.

Selecting an Action Tables

To select a different strategy table, tap on the 'Table' button in the lower right of the Action mode screen. From this dialog you can select a different table or start a new table.

Figure 5: *Select Action table*

Notice that the 'Use action table in Drill mode' checkbox is off by default in *Blackjack Mentor*. This means that Drill mode will only use the built-in action table, and that the action table will be ignored. You must check this option if you want to use the selected action table.

Blackjack Mentor comes preprogrammed with many popular strategy tables. The rule abbreviations introduced in the *Blackjack - Rule Variants* section are used in the default names to guide you in your table selection. Simple tap on the drop-down list of names and select the action table of your choice.

To create your own strategy matrix, tap on the 'New table' button. A new table is created based on the currently selected table. You should rename it with the 'Rename table' button.

Use the 'Delete' button to delete any table (including the default tables). If you accidentally delete a table, just tap on the cancel button for the Edit dialog and your changes and deletions will be discarded. Tap 'OK' to return to Action mode and accept all changes.

Use the 'Reset table' button to restore an action table to an original default configuration. The default tables that initially come with *Blackjack Mentor* are permanently available. This is useful if you accidentally change one of the default tables and want to restore it. Or, if you delete the built-in tables to save memory and later want to build a new strategy matrix based one of these default tables.

Changing the Action Table

Figure 6: *Changing the Action table*

You can change the plays for the currently selected strategy matrix in Action mode. Start by selecting the play pane in the lower left (Hard, Soft or Pairs). Tap on a cell, then click on the intended action button along the bottom of the screen (**H** for hit, **S** for stand, **D** for double, **P** for split, and **U** for surrender).

Remember: the Action table is not used by default in Drill mode with *Blackjack Mentor*! You have to turn on the 'Use action table' option in the *Preferences* dialog or in the 'Table' Action table dialog. Otherwise, the built-in multi-deck strategy is used instead.

2.6. Preferences
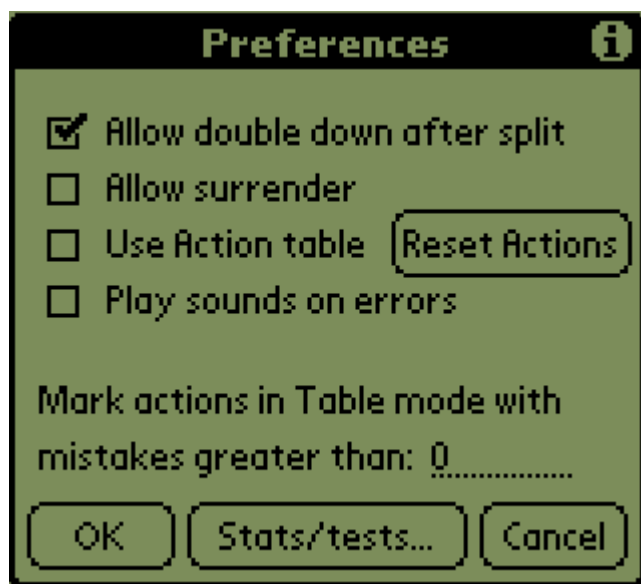
Figure 7: *Blackjack Mentor preferences*

To change the options for *Blackjack Mentor*, select 'Preferences' from the 'Command' menu (tap on the 'Menu' icon in the lower left of the silk screen to bring up the main menu).

Uncheck 'Allow double after split' to switch the default built-in table to noDAS strategy. This turns some of the splitting recommendations for twos, threes and fours into 'hits'. This option has no effect if the 'Use action table' option is checked.

Check the 'Allow surrender' option if the casino permits the Surrender option. Few casinos allow this option anymore, so it is unlikely you will need it. Basic strategy only recommends surrender on a few hard 15 and 16 hands. This option has no effect if the 'Use action table' option is checked.

Check 'Use action table' if you want to use the selected strategy matrix in Action mode instead of the built-in table. This option must be checked before the Action table matrix is used in Drill, Table, or Memorize mode.

Tap on 'Reset Actions' to copy the default built-in strategy matrix into the currently selected Action table. It is unlikely that you will need to do this, since you can use the 'Reset table' option in the Edit dialog of Action mode.

If you want a warning sound to be played after any play mistake, set the 'Play sounds on errors' checkbox.

By default, all mistakes are displayed with an 'x' in Table mode. The last option in the Preferences dialog lets you change the number of mistakes at which errors are displayed.

Stats/tests Preferences Dialog
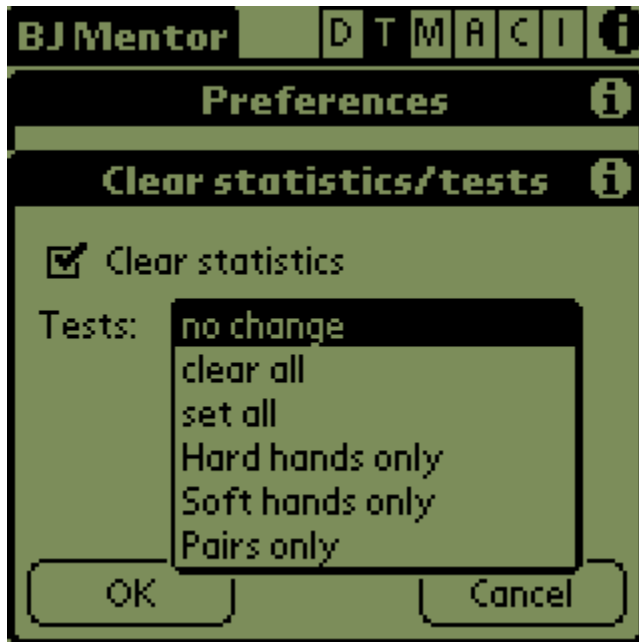
Figure 8: *Stats/tests preferences dialog*

Use this dialog to reset the statistics and Test options. In Table mode, you can specify which plays you want to be tested on. You can turn them all on or off, so that it is easier to configure them the way you want. You may also set the Test checkboxes so that you are drilled only on hard hands, soft hands, or pairs.

The 'Clear statistics' button will clear the history of Drill mode mistakes (displayed with an 'x' in Table mode). You may want to clear these statistics occasionally since the hand selection in Drill Mode is biased toward the hands you guess incorrectly.

3. Blackjack Counter

This section is designed to introduce you to the features of *Blackjack Counter*. For detailed information, tap on the 🛈 icon in any mode, or any dialog. Additional help is available from the 'Help' menu.

You should review the *Blackjack Mentor* section before reading this guide. *Blackjack Counter* has every feature of *Blackjack Mentor*, plus additional card counting support.

3.1.   Count Mode

Count mode is used to practice counting down a shoe and to edit or create new count systems. Counting down a shoe starts with a shuffled set of cards and displaying them in batches until the shoe is exhausted. The idea is to keep track of the displayed or running count while dealing out the shoe, in the least amount of time and without making any errors. This drill builds your ability to quickly tabulate the count as the cards are dealt.

Blackjack Counter has many options you can set to control how the count down occurs.

Card Counting Options

Tap on the 'Options' button in Count mode to configure the card counting options. This dialog controls the Count down drill, and lets you select or edit Count systems.
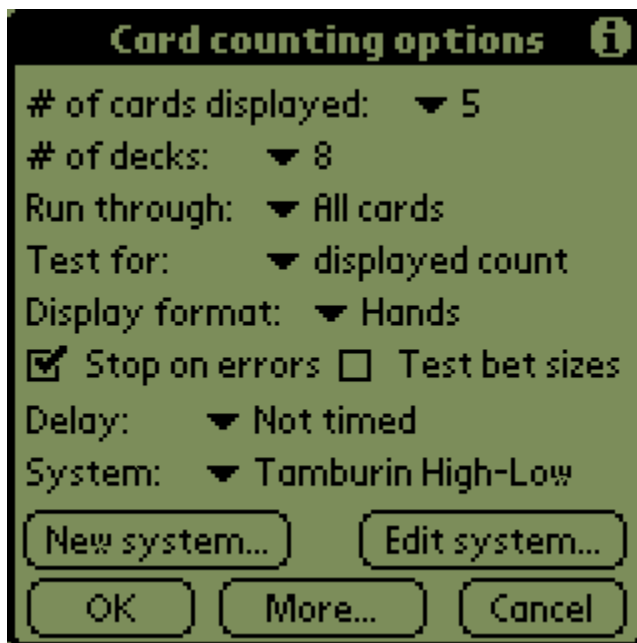

**Figure 9:** *Changing Count options*

The Count drill options are as follows:

- **# of cards displayed:** The number of cards displayed in each batch while counting down.

- **# of decks:** The number of 52 card decks shuffled into the shoe at the start of the count drill.

- **Run through:** This determines the penetration into the shoe before the count drill is completed.

- **Test for:** After each batch of cards is displayed, you must specify the count. This option determines whether you enter the running count or the count of cards displayed in the batch.

- **Display format:** With the default 'Hands' format, *Blackjack Counter* deals the cards following basic strategy until the 'number of cards displayed' is met. Up to three hands are displayed, and the dealer hand (to the left) is not played out at all (ignore the face down card). The alternative 'Table' format displays a fixed number of cards in a tableau for each batch. The 'Rounds' format is similar to the 'Hands' format but actually plays out the dealer hand completely (which is the leftmost hand), and more closely matches actual playing conditions. For the some count systems, such as Speed Count (see "What is Speed Count?"), the 'Rounds' option is required since the system depends on all hands being played-out normally.

- **Stop on errors:** By default, specifying an incorrect count will cause an error dialog to be displayed and require you to re-enter the count. If this option is not checked, specifying an incorrect count will not display an error dialog, but will instead cause the display to flash.

- **Test bet sizes:** If this option is checked, you will be prompted to enter the correct bet size after the completion of each batch. Bet sizes are determined by the run or true count (depending on the system), so you will have to keep track of the count with this option enabled.

- **Delay:** This useful feature determines the way the count drill is done. The default, not timed, means that you must enter the count after each round of cards is displayed. Alternatively, you can specify a display time for each round: each round is displayed for the minimum time selected This means that the total time may be slightly higher than expected, especially for short delays. After the shoe is done (based on the run through option), you must enter the count. This feature lets you practice card counting as cards are dealt. For example, the following options represent a one deck count-down in approximately 30 seconds:
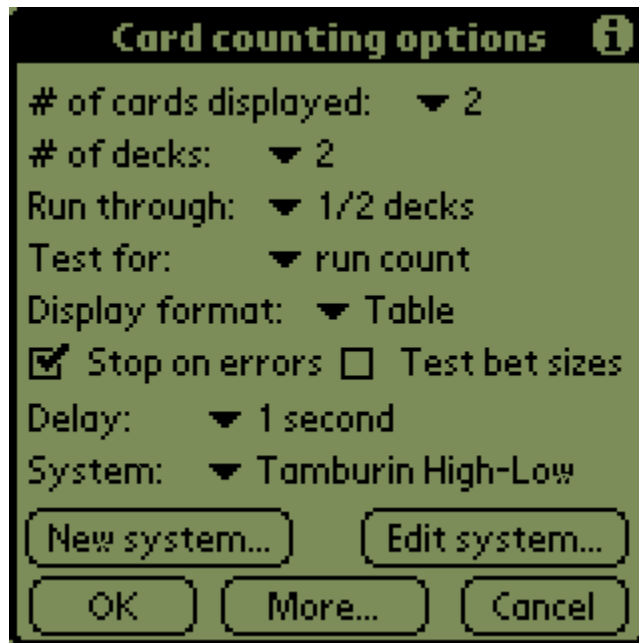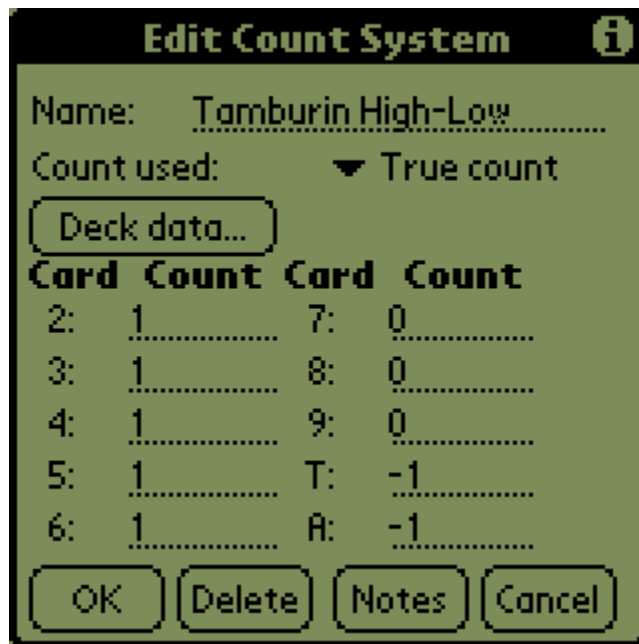

Figure 10: *Timed deck count down*

Selecting a Count System

Select a Count system from the drop-down list next to the 'System:' label. Several popular systems are preprogrammed into *Blackjack Counter*.

Tap on the 'New system' button to create a new system based on the currently selected entry. When you do this, the Edit Count System dialog is opened.

Editing Count Systems

Figure 11: *Editing Count systems*

Tap on the 'Edit system' button in the Count options dialog to edit the selected system.

You may change the name of the system in the top field. Next you may specify whether the system operates on run count, true count, true half deck count, or Speed Count (see "What is Speed Count?"). This setting determines the meaning of all specified count values for the IRCs, bet size ranges, and indices. 'True half count' is the true count measured in half decks (i.e. with 2½ decks remaining you would divide the running count by 5 instead of 2½). The Uston Advanced Plus/Minus system uses a true half deck count.

You can delete the displayed system by tapping on the 'Delete' button. If you accidentally delete a system, simply tap on the 'Cancel' button to discard your changes.

You can view or edit notes for any count system. For the default systems, the notes describe the origin of the system, and which action table and index set to use with it.

Enter the count values for each card in the main table. Values may be positive or negative whole numbers or fractional numbers ending in ½ (i.e. -4.5 is acceptable).

You can also indicate that only the red (hearts and diamonds) or black (clubs and spades) colors of a card rank are to be given a value. For example, if only red sevens are to be values as -1, enter '-1r'. To indicate that only the black cards are to be valued, follow the count with a 'b'. The cards with the other color are implicitly valued as zero. When you have selected a system that uses colored count values, the covered cards that are displayed in Count mode for 'Hand' display will have suites displayed to the side. This allows you to evaluate the card value properly.

Count System Deck Data

Tap on the 'Deck data' button to edit system information that depends on the number of decks in the game.
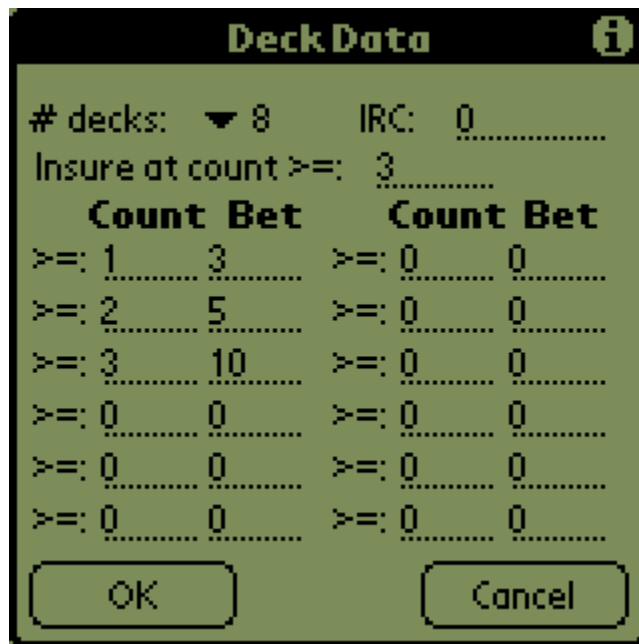

Figure 12: *Count system deck data*

Several aspects of a count system depend on the number of decks in play. The Deck Data dialog is used to set these options. Select the number of decks from the drop-down list and set the associated options:

- **IRC:** The Initial Run Count is the value to start the system count at. For true count systems, this is usually zero. Unbalanced systems typically have different IRC values for different number of decks.

- **Insure at count >=:** If the count is sufficiently high, insurance should be accepted. This indicates the value at which to take insurance.

- **Count/Bet:** This table defines a set of count ranges that determines the appropriate bet size. The values in the count column must strictly increase. For counts less than the first entry, a bet size of 1 unit is assumed. Rows with a bet size of zero are ignored. For example, the bet table in Figure 12 would require the following bets:

Count	Bet Size
-10	1
0	6
0.5	6
8	10

The IRC, insurance and count fields must be positive or negative whole numbers, or fractional numbers ending in ½ only (i.e -0.5 is valid). The bet fields can only be positive numbers which should be larger than 1 (since a unit bet size is assumed when the count is less than the first entry).

3.2. Count Down Drills
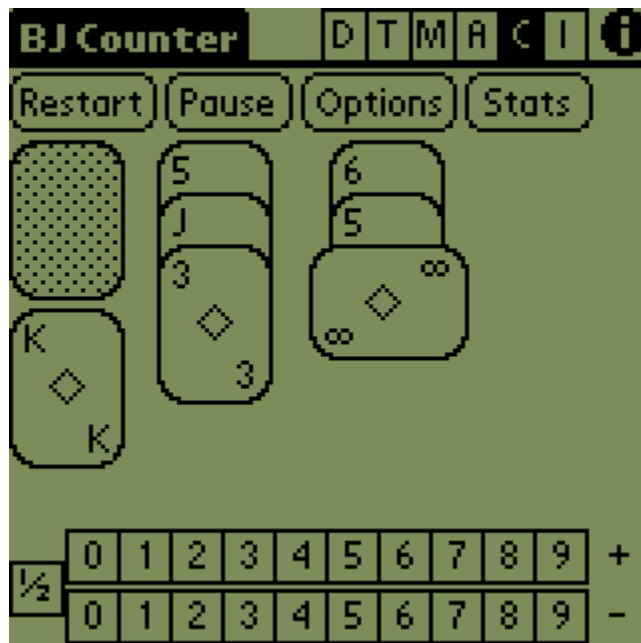
Figure 13: *Counting down a shoe in Count mode*

Once you have set the Count options, you can start counting down a shoe. Begin by tapping on the 'Start' button in the upper left. Cards will be drawn from the shoe and displayed on the screen.

If you have selected the 'Hand' setting for the 'Display format' option, then the cards will be dealt in one or more hands, according to basic strategy. The leftmost column indicates the dealer's upcard, while the remaining cards are player hands. Double down cards are displayed sideways, as shown in Figure 13. Up to three hands are dealt, depending on the number of cards requested to be display per batch. The intention of this display format is to mimic the layout of a casino deal.

Setting the 'Display format' option to 'Table' draws the cards in two even rows.

Notice that the 'Start' button is relabeled to 'Restart' once the count down is begun. Tap on this button to reshuffle the shoe.

Tap the 'Pause' button to temporarily stop the count down timer.

Specifying a Count

Use the buttons along the bottom of the screen to enter the count (either the run count, or displayed count, depending on the option you have selected). If the count is negative, tap on one of the bottom buttons. If the count is positive, tap on one of the top-row buttons.

If the count is greater than 9, tap a digit on one row, then the other. Tap a digit on the top row first if the count is positive, or the bottom row first if the count is negative. If you choose an incorrect digit, simply tap on it again to deselect it.

If the count is fractional, precede the steps above by tapping on the ½ button. You may tap on it again to deselect it. Note that Count mode does not test for true count, so the only possible values are whole numbers or fractions that end in ½.

If the count you have entered is incorrect, an error dialog is displayed and you must try again. If the 'Stop on errors' option is not checked and the wrong count Is entered, then the next count batch is displayed after the screen is flashed briefly.

Here are some sample counts, and the digit buttons you would press in sequence:

Count	Buttons
3	3 (+)
-4	4 (-)
0	0 (either row)
12	1 (+), 2 (-)
-30	3 (-), 0 (+)
-1.5	½, 1 (-)
0.5	½, 0 (+)
-0.5	½, 0 (-)
39.5	½, 3 (+), 9 (-)

Specifying a Bet Size

Figure 14: *Bet size entry*

If you have set the 'Test bet sizes' count option, you will be prompted to enter the bet after each batch of cards is displayed. Tap on the unit bet size that is correct for the current count. If you don't want to enter a bet, tap on the 'Skip bet entry' button.

If you enter an incorrect bet size, a dialog will be displayed indicating the correct bet size and current counts. When the system uses a true count, the current count is rounded down to the nearest half to determine the bet size.
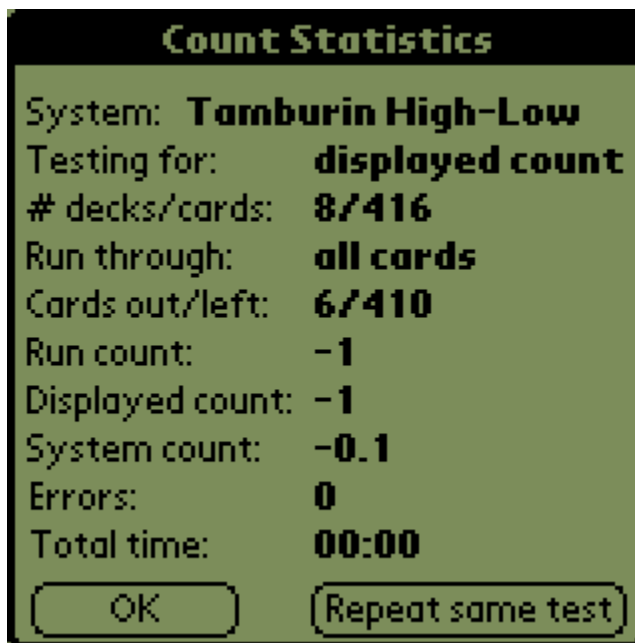
Count Mode Statistics

Figure 15: *Count statistics*

Tap on the 'Stats' button during a count down drill to see the current information for this shoe.

- **System:** The currently selected count system.

- **Testing for:** Whether you should enter the run count or the displayed count.

- **# decks/cards:** The number of decks in the shoe and the total number of cards.

- **Run through:** The selected deck penetration.

- **Cards out/left:** The total number of cards played, and the number of cards remaining in the shoe.

- **Run count:** The current run count (including the displayed cards).

- **Displayed count:** The count of the cards in the current batch.

- **System count:** The current system count. This will be the true count, unless the system uses true half count or run count.

- **Errors:** the number of errors you have made so far when specifying the count and bet sizes.

- **Total time:** The total time elapsed in this count down drill. The timer is stopped when the drill is paused.

Click on the 'Repeat same test' button to repeat this count mode test with the same exact cards. This is useful for determining where you made a mistake. Note that if you change options, the test will be different. Click this button, then 'Start' immediately to repeat the same sequence of cards.

3.3. Index Mode

The Index mode is used in *Blackjack Counter* to set the index values for a count system. Although index sets must be used with the correct count system, *Blackjack Counter* treats them as independent items. You choose a matching count system and index set in Drill mode by tapping on the 'Options' button.

Selecting an Index Set

To select, edit or create an index set, tap on the 'Set' button in Index mode.
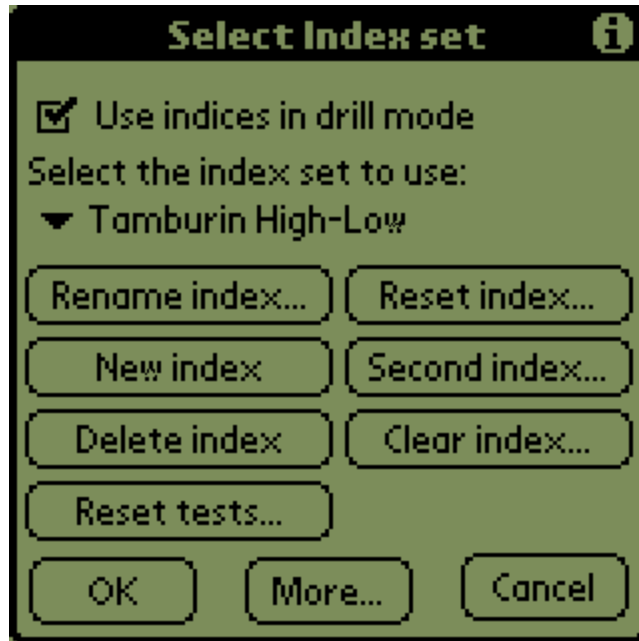
Figure 16: *Select an Index set*

The 'Use indices' checkbox at the top of the dialog determines whether to test index values in Drill mode. When checked, a random count is displayed in Drill mode that may require a strategy deviation based on the matching index value. When not checked, the count is not displayed.

Blackjack Counter comes preprogrammed with many different index sets for the supported count systems. Index sets often depend on the number of decks and the rule variants. The names use the rule abbreviations introduced in the *Blackjack - Rule Variants* section. The notes for the default count systems indicate the corresponding index sets.

You can create a new Index set based on the current selection by tapping on the 'New index' button. You should change the default name with the 'Rename index' button.

Tap on the 'Delete index' button to remove any index set. If you accidentally delete an index set, simply tap on 'Cancel' to discard any changes you have made.

In Drill mode, you may only want to be tested on the hand combinations that have indices defined for them. Use the 'Reset tests' button to have the Test options in *Table Mode* reset accordingly.

Use the 'Reset index' button to restore an index set to an original default configuration. The default index sets that initially come with *Blackjack Counter* are permanently available. This is useful if you accidentally change one of the default index sets and want to restore it. Or, if you delete the built-in index sets to save memory and later want to build a new matrix based one of these default sets.

Use 'Clear index' to turn off all of the indices in this set. This is useful when you are entering a completely new index set from scratch.

Second Index set

Blackjack Counter allows you to configure up to two index sets to be used to determine the correct plays. This feature is rarely required with most count systems. The most common instance where this can be useful is with Surrender.

Consider the following common index on hard 16 versus a dealer 10. With an action table entry of hit, the index might say to stand if the count is greater or equal to 0, and surrender if the count is greater than -2. The second index alone is not sufficient, since hard 16 with three cards or more still requires the first index to be checked.

To handle this properly in Blackjack Counter, you would configure the action tables and index sets as follows:

- Action table: 16/10:Hit
- Index set: 16/10, c>=0:Stand.
- Second index set: 16/10: c> -2: Surrender

The secondary index always takes precedence, as long as it can be applied. If it cannot be applied (in the case of a double or Surrender action with three cards or more), then the first index is checked. Although *Blackjack Counter* does not test for anything but two card combinations in Drill mode, this situation can occur in *Blackjack Expert*.

To use this feature, simply create an appropriate second index, and make sure it is selected and enabled in the 'Second index' dialog.

Changing Index values

Figure 17: *Index mode*

The Index mode is similar to the Table mode in that the full basic strategy matrix is displayed with the Hard, Soft, and Pair buttons available in the lower left. The actions that are displayed depend on the 'Use action table' option in the *Preferences* dialog. This

would usually be set when using Index sets. Since an index set depends on the correct action table, make sure the right action table is selected in *Action Mode*.

To view or change an index value, tap on the corresponding cell. A summarized index string is displayed along the bottom of the screen. If nothing is displayed, then this play does not have an index defined for it. The string is of the form 'c<qual><count>:<action>':

- **<qual>:** one of '>=', '>', '<=', '<'

- **<count>:** the count value for the index

- **<action>:** one of the basic action letters, 'H' (hit), 'S' (stand), 'D' (double), 'P' (split), 'U' (surrender)

Play table entries that have an index defined for them have an 'I' displayed in the upper right of the cell.

To change or set an index value for a play, simply select the cell and tap on the 'Index' button, or quickly double-tap on the cell. The 'Set Index Value' dialog is displayed.
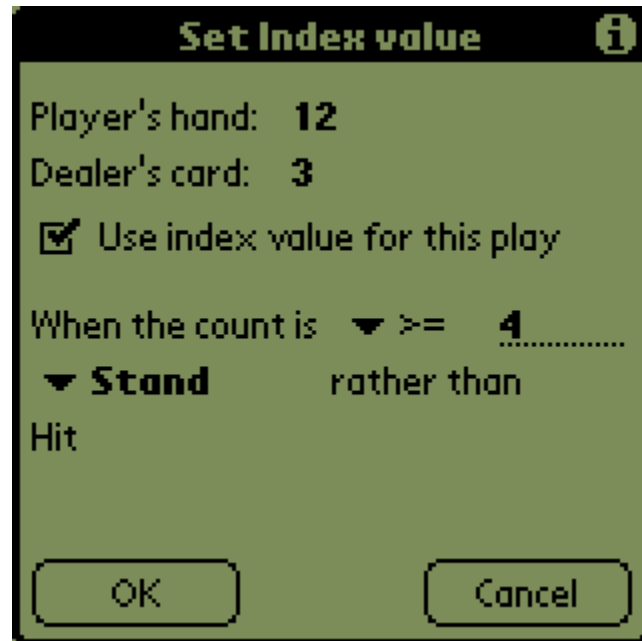
Figure 18: *Set Index value*

Set the 'Use index value' checkbox to define an index for this play. If you don't set this option, the remaining settings will be ignored.

An index is a count value at which to use a different action for this hand combination. The index triggers when the count goes below or above a certain value. Choose the substitute action as well.

3.4. Counts in Drill Mode

Once you have selected a count system, action table, and index set, you are ready to start practicing in Drill mode. Drill mode in *Blackjack Counter* has been enhanced to test you using the index values and insurance plays.

It is very important to make sure that you have selected a matching count system, action table, and index set. By default, *Blackjack Counter* is configured to use the 'Tamburin High-Low' system with the 'Multi2: DAS' action table and 'High-Low' index set.

Drill mode is **not** a Blackjack simulator; it does not deal from a shoe or let you play out the hand. The intention is to test you on the key plays, and help you quickly memorize the count system parameters.

Drill Options

Although you can set all of the drill options in other modes, they are available in one dialog in Drill mode to make sure you set matching entries. Tap on the 'Options' button to bring up the Drill options.
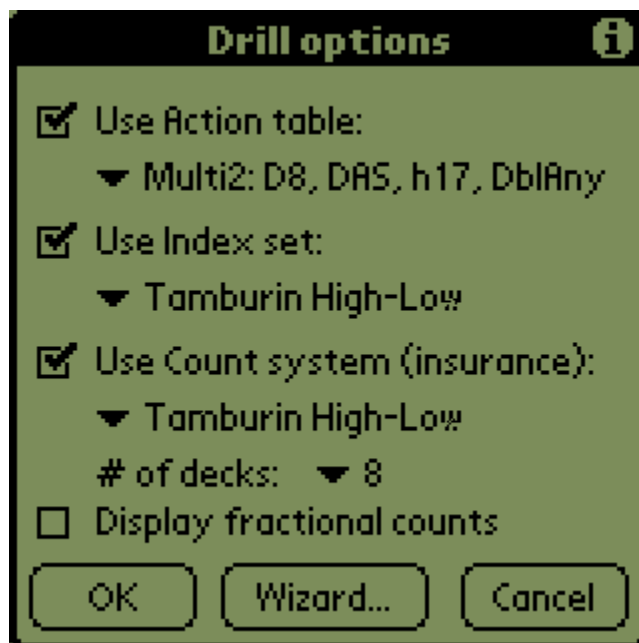
Figure 19: *Drill mode options*

Select the Action table, Index set, and Count system to use. If you do not set the 'Use Action table' option, the default built-in multi-deck strategy is used. If 'Use Index set' is not set, then the index values and count are not used to determine the correct plays.

The Count system is only used to test you on insurance. If this option is not set, then you will not be tested on insurance. Drill mode does not test you on bet sizes, which is why the other information about the system is not used.

The 'Display fractional counts' checkbox determines whether the random counts displayed in Drill Mode will include fractional values. By default, this option is turned off. If your count system depends of fractional true counts, then turn this option on.

Use the 'Wizard' button to have the software try and select a matching action table and index set based on the selected count system and number of decks. Note that this feature only works with the default built-in count systems, such as 'High-Low'. If you have added your own system, then you will have to pick a matching action table and index set yourself.

Drill mode with Counts

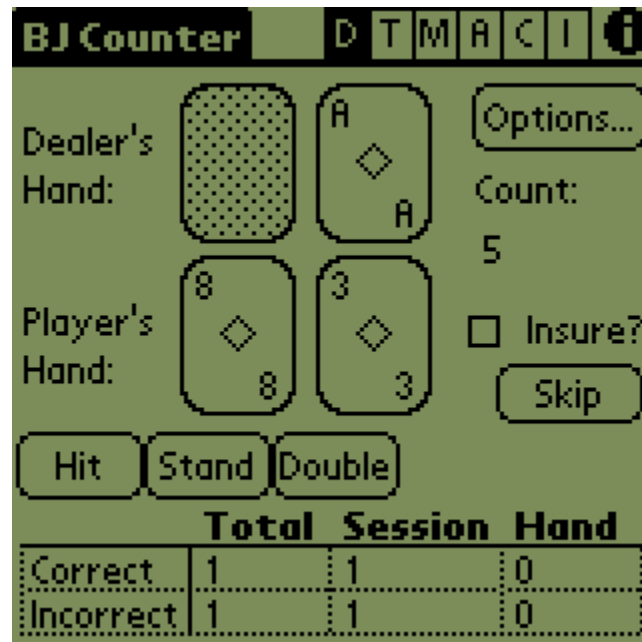Once you have selected your Drill options, you are ready to beginning testing!

**Figure 20:** *Drill mode with Count features*

The Drill mode in *Blackjack Counter* has every feature that is available in *Blackjack Mentor*. You should be familiar with the *Using Drill Mode* section before proceeding with this material.

Random hands are selected from the play table. A random count is displayed as well that may require a deviation in strategy due to the corresponding index value. If the dealer has an ace showing, an 'Insure?' checkbox is also displayed, which you must set correctly based on the count.

You may wonder if the displayed count is the run count or true count. Surprisingly, this is not relevant at all to Drill mode! The index and insurance values are relative to whatever the system uses. Since Drill mode chooses hands randomly instead of dealing from a real shoe, it doesn't matter what the count value represents. Run count and true count are only used in Count mode.

3.5. Saving System Databases

You can save the count systems, action tables, and index sets you create to a separate database so that you can share them with other users, or to backup them up. Select the 'Save systems…' item from the Command menu.
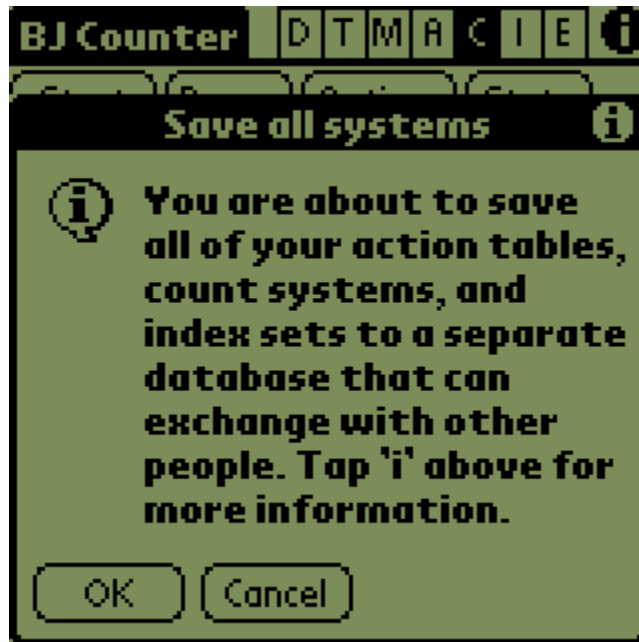
Figure 21: *Saving your systems*

After you have confirmed the prompt, all of your count system data is saved to a special Palm database called 'BJCCSystems'. When you hotsync next, this database is backed up to a special file called 'BJCCSystems.pdb' in your Palm user directory on your desktop computer.

You can give this file to other users of *Blackjack Counter*, and they can install it as they would any other Palm program or '.prc' file. When they next run *Blackjack Counter*, they will be prompted whether they want to add the data. If they already have existing systems with the same name, they have the choice of replacing, ignoring, or adding the new data. Note that this is very likely to happen if you save the default systems that come with Blackjack Counter.

Note: if you save your systems, then rerun Blackjack Counter, you will be prompted whether you want to load the saved systems. You can tap the 'No, delete all' button to delete the new database so it won't ask you again the next time you run Blackjack Counter. You probably want to hotsync your Palm Pilot before you delete the database though (so that you have a separate copy to share or backup).

4. Further Reading

Although *Blackjack Counter* is designed to get you started in card counting without further books or software, you may be interested is some of the popular literature. A wealth of material is available both in print and on the Internet. Included below are some helpful resources.

4.1. Books

There are countless books on Blackjack and counting systems. These are some of the books used as reference material while building *Blackjack Counter.*

Blackbelt Blackjack, Arnold Snyder

A great resource for advanced blackjack strategy. The author the 'Red 7' unbalanced count system, on which the 'Red 7 Improved' system in *Blackjack Counter* is based.

Knock-Out Blackjack, Olaf Vancura and Ken Fuchs

Frequently referred to as 'The easiest card-counting system ever devised', and deserving of this title! This system is easy to use, yet surprisingly effective (from 0.5% to 1.5% player expectation, depending on the game, decks, and rule variants).

Million Dollar Blackjack, Ken Uston

This is one of the most comprehensive books on Blackjack, by an unsurpassed expert. Although the book is dated, it includes several superb count systems ranging in difficulty. Wonderful tales by the author as well!

Professional Blackjack, Stanford Wong

The most popular true count system every devised. The best blend of power and ease-of-use in a count system. The default in *Blackjack Counter*.

Blackjack - Take the Money and Run, Henry J. Tamburin

A good introductory guide to Blackjack counting systems and strategy. Includes a simple true count system with a reduced index set.

4.2. Internet Resources

An incredible number of resources are available online about Blackjack. Although you may run across a lot of online casinos, many sites contain useful commentary, strategy tables and other resources.

Resource Sites

- www.bjinsider.com: A great information site hosted by Henry Tamburin. Superb novice explanations of card counting, and useful articles.

- www.bjmath.com: Great articles, especially in the 'Novice' section. Excellent Basic Strategy tables for many games.

- www.bjrnet.com: Current news, and some useful tutorials.

- www.s-a-g-e.com: A fully functional shareware Blackjack simulator for Windows. Some good beginner guides on counting and basic strategy.

- www.bj21.com: Popular message board and forums for Blackjack players. Although some parts of the site are restricted to paying members, the free forums are very valuable.

- http://games.groups.yahoo.com/group/blackjackcardcounterscafe/: An active forum for serious online players. Useful discussions on current casino conditions.

Online Stores

- www.bj21.com: Great Windows software, a good selection of some of the best books on Blackjack, and good prices. Highly recommended.

- www.bjrnet.com: Selected books and a wide range of professional Blackjack software for Windows.