Blackjack Counter database

Basic

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Thank you for purchasing this supplementary database of action tables for Blackjack Counter. This set includes many Basic Strategy action tables for different casino rule variations. We have attempted to provide a thorough list of Basic Strategy tables covering different deck counts, DAS/noDAS, and S17/H17.

Although *Blackjack Counter* comes with a number of pre-configured tables, they are re-included in this database. A number of small corrections have been made to the default tables over time. By including them here, you are assured that you will get the most current and correct versions.

In theory, there is only one optimal Basic Strategy for any given casino rule set. But there are subtle differences in the tables, depending on which authority you consult! On some Blackjack plays, the gain or loss to the player (expectation) is very similar for two different actions. The result is that different experts list different plays, depending on their own personal judgement.

To help select the best choices for this database, many different books and other Blackjack resources have been consulted. Where there is ambiguity, we ran tests using our DeepNet Blackjack Audit simulation software to measure the exact expectation/performance for the hand combination.
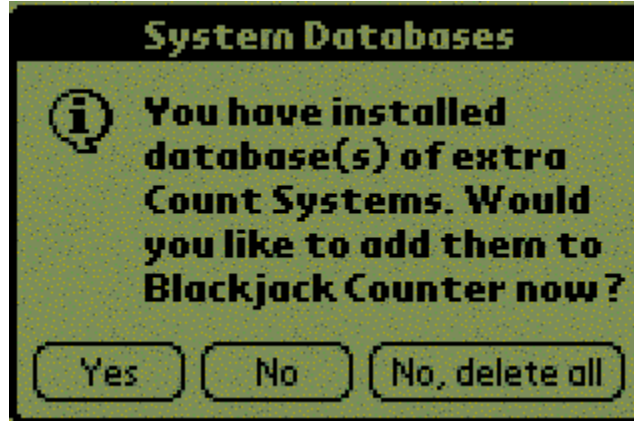
If you want to modify any of these tables, we recommend you make a copy and modify that, rather than changing the original. After loading the database into *Blackjack Counter*, follow these instructions:

- Go to Action mode
- Tap on the 'Table' button
- Select the Action table you want to start with.
- Tap on the 'New table' button.
- Tap on the 'Rename table' button, and enter a different name.
- Tap the 'Ok' button.
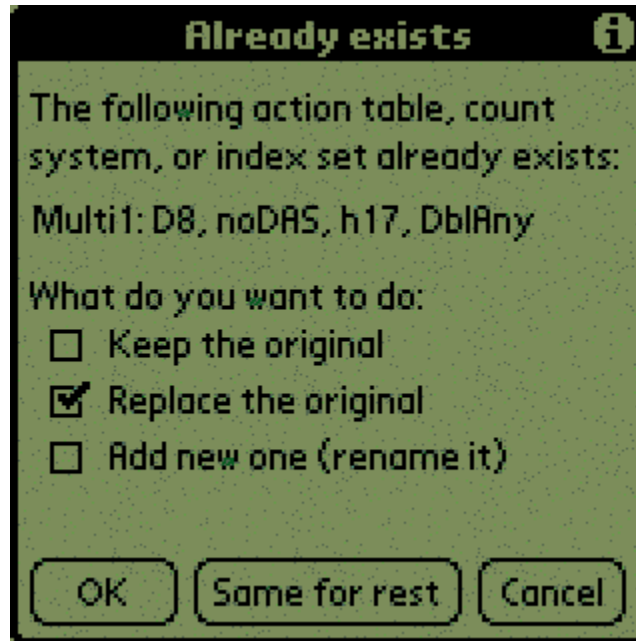- Modify the action table plays as necessary.

Installation for Palm OS

To install this database in *Blackjack Counter for Palm OS*, do the following:

- Make sure version 3.0 or higher of *Blackjack Counter* is installed and registered on your Palm device. Select 'About' from the Help menu to check the version number. You can get the latest version from our web site: http://www.deepnettech.com/bjcounter.zip. To install the newer version, simply install the 'bjcounter.prc' program in the downloaded zip file to your Palm device. **Do not uninstall your prior version of Blackjack Counter.** If you do, you will lose any custom databases you have created, and will have to re-enter your registration code. Make sure you run *Blackjack Counter* at least once before installing this supplementary database.

- Extract the pdb file(s) from the zip file that was e-mailed to you after you purchased the database.

- Install these pdb files to your Palm device, as you would any other program (see the User Manual that came with your Palm device if your are unsure how to do this). If your desktop operating system is Windows, all you have to do is double click on the pdb file from Explorer.

- Run *Blackjack Counter* on your Palm device. You will see this screen:

- Tap on the 'Yes' button. The extra action tables, count systems, and/or index sets in this database will be installed in *Blackjack Counter*. This dialog will not come up again after the database is installed. If you tap 'No', the database is not installed and you will be prompted again the next time you run *Blackjack Counter*. If you tap 'No, delete all', the database is not installed and is deleted (you will not be prompted the next time you run *Blackjack Counter*.

- **Note:** Databases can only be installed if *Blackjack Counter* is registered.

- This database includes all of the default tables that come with *Blackjack Counter* initially. They are included in this database since there have been a number of small corrections made over time.
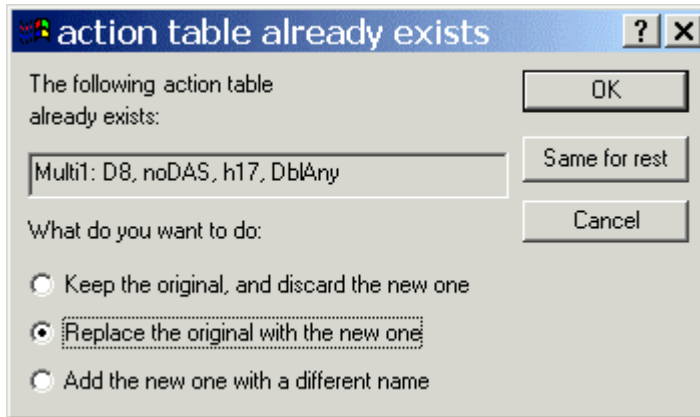
- Although you have several choices, you should use 'Replace the original' option and tap on the 'Same for rest' button. This will update your default systems and ensure that your tables are correct.

- Switch to Action mode, and tap on the 'Table' button.

- Make sure the 'Use action table' checkbox is set.

- Select the action table you want to use. The heading describe the different tables.

- **Note:** do not install more than one supplementary database in *Blackjack Counter* at a time. Sync one database, run *Blackjack Counter* to incorporate the database, then install the next database.

Installation for Windows

To install this database in *Blackjack Counter for Windows*, do the following:

- Extract the pdb file(s) from the zip file that was e-mailed to you after you purchased the database.

- Start *Blackjack Counter for Windows*. Select 'Open settings/systems…' from the file menu. Switch the 'Files of type' option in the file browser to 'BJ Counter file (Palm, *.pdb)'. Select the pdb file you downloaded and saved in the prior step.

- Click 'OK' to the next dialog to input the new systems.

- This database includes all of the default tables that come with *Blackjack Counter* initially. They are included in this database since there have been a number of small corrections made over time.

- If you have any action tables, count systems, or index sets with the same names, you will be prompted about replacement. Switch the selection to the second replacement choice as shown below, and click on the 'Same for rest' button.
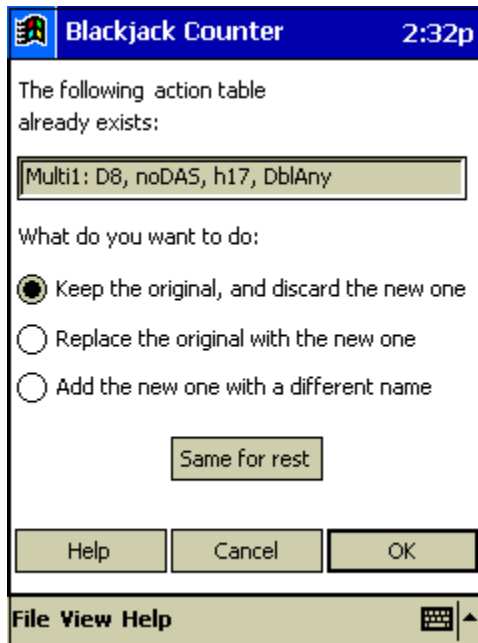

- Switch to Action mode, and tap on the 'Table' button.

- Make sure the 'Use action table' checkbox is set.

- Select the action table you want to use. The heading describes the different tables.

Installation for Pocket PC

To install this database in *Blackjack Counter for Pocket PC*, do the following:

- Extract the pdb file(s) from the zip file that was e-mailed to you after you purchased the database.

- Put your Pocket PC device in the cradle and turn it on.

- Start the 'Microsoft ActiveSync' program from the Start/Programs menu on your Windows desktop.

- Click on the 'Explore' toolbar button in ActiveSync. Copy the pdb files extracted earlier to the device directory window just opened (the root 'My Documents' folder is the initial directory that is opened).

- Start *Blackjack Counter for Pocket PC*. Select 'Open settings/systems…' from the file menu. Make sure the 'Type' option in the file browser is set to 'BJ Counter file (Palm, *.pdb)'. Select the pdb file you downloaded and saved in the prior step.

- Click 'OK' to the next dialog to input the new systems.

- This database includes all of the default tables that come with *Blackjack Counter* initially. They are included in this database since there have been a number of small corrections made over time.

- If you have any action tables, count systems, or index sets with the same names, you will be prompted about replacement. Switch the selection to the second replacement choice as shown below, and click on the 'Same for rest' button.

- Switch to Action mode, and tap on the 'Table' button.

- Make sure the 'Use action table' checkbox is set.

- Select the action table you want to use. The heading describes the different tables.

Multi1: D8, noDAS, h17, DblAny

This action table applies to the following casino rules:

- 4 or more decks.
- No double after splits (noDAS).
- Dealer hits on soft 17 (H17).
- Player may double any first two dealt cards (DblAny).

Simulation Results

Your expectation for this game is **-0.67%,** using flat betting and 3/4 eight deck shoe penetration (you will lose on average 67 cents for each $100 bet). This data was derived using Blackjack Audit, a new simulation analysis program by DeepNet Technologies. The expectation is the amount won or lost in the simulation divided by the total of all bets. 1 billion rounds were run in this simulation.

Multi2: D8, DAS, h17, DblAny

This action table applies to the following casino rules:

- 4 or more decks.
- double after splits (DAS).
- Dealer hits on soft 17 (H17).
- Player may double any first two dealt cards (DblAny).

Simulation Results

Your expectation for this game is **-0.54%**, using flat betting and 3/4 eight deck penetration (you will lose on average 54 cents for each $100 bet). This data was derived using Blackjack Audit, a new simulation analysis program by DeepNet Technologies. The expectation is the amount won or lost in the simulation divided by the total of all bets. 1 billion rounds were run in this simulation.

Multi3: D8, DAS, s17, DblAny

This action table applies to the following casino rules:

- 4 or more decks.
- Double after splits (DAS).
- Dealer stands on soft 17 (S17).
- Player may double any first two dealt cards (DblAny).

If you look very carefully, you will find that this table is **exactly** the same as the built-in 'Multi2: D8, DAS, h17, DblAny' action table. In other words, S17/H7 makes no difference in multi-deck play. So why did we include it here?

Not every Blackjack expert, resource or book agree 100% on this table. We have consulted a wide range of resources and tried many simulations with different tables, and have confirmed that this strategy is best for eight deck Blackjack (S17 or H17). Having said this, included below is an analysis of some of the variations you may run into.

This table corresponds exactly to the following resources (see Bibliography): "Blackjack: Take the Money and Run", "Million Dollar Blackjack", "The World's Greatest Blackjack Book", "Blackjack for Blood".

A2/5

In "Professional Blackjack" by Stanford Wong, he recommends hitting soft 13 (Ace, two) versus a dealer's 5 up card. No other resources, books or on the web, recommend this play. Analysis shows that the gain is very marginal with doubling this play. Also, most balanced count systems have an index value of zero for A2/5, which further indicates a marginal call. If you are not using a count system, then you could choose to not double this play.

11/A:D, A8/6:D, A7/2:D

You may find some Internet resources, namely http://www.bjmath.com, that suggests to double in these circumstances **if the dealer hits soft 17 (H17)**. Detailed analysis in *Blackjack Audit* and *Statistical Blackjack Analyzer (SBA)* clearly show that all of these plays do **not** improve your game, with S17 or H17.

Most Blackjack resources recommend the same table for S17 and H17, with multi-deck, DAS, and DblAny. This is why our two tables are identical in this database.

Simulation Results

Your expectation for this game is **-0.35%**, using flat betting and 3/4 eight deck penetration (you will lose on average 35 cents for each $100 bet). This data was derived using Blackjack Audit, a new simulation analysis program by DeepNet Technologies. The expectation is the amount won or lost in the simulation divided by the total of all bets. 1 billion rounds were run in this simulation.

Multi4: D8, noDAS, s17, DblAny

This action table applies to the following casino rules:

- 4 or more decks.
- No double after splits (noDAS).
- Dealer stands on soft 17 (S17).
- Player may double any first two dealt cards (DblAny).

The differences in Basic Strategy from DAS to noDAS in multi-deck are universally agreed upon. The only differences occur in some of the pair hands. The following table shows the lines with differences (bold items vary from the DAS strategy, which calls for splitting in these cases):

Dealer up card

Hand	2	3	4	5	6
22	**H**	**H**	P	P	P
33	**H**	**H**	P	P	P
44	H	H	H	**H**	**H**
66	**H**	P	P	P	P

Simulation Results

Your expectation for this game is **-0.47%**, using flat betting and 3/4 eight deck penetration (you will lose on average 48 cents for each $100 bet). This data was derived using Blackjack Audit, a new simulation analysis program by DeepNet Technologies. The expectation is the amount won or lost in the simulation divided by the total of all bets. 1 billion rounds were run in this simulation.

Single1: D1, noDAS, s17, DblAny

This action table comes with *Blackjack Counter* but had an incorrect entry prior to version 2.56. 99 versus dealer ace was listed as split; the correct strategy is stand. Installing this database corrects the problem. This Basic Strategy table corresponds to these casino rules:

- 1 deck.
- No double after splits allowed (noDAS).
- Dealer stands on soft 17 (S17)
- Double on any first two dealt cards (DblAny).

Simulation Results

Your expectation for this game is **-0.07%**, using flat betting and 2/3 shoe penetration (you will lose on average 7 cents for each $100 bet). This data was derived using Blackjack Audit, a new simulation analysis program by DeepNet Technologies. The expectation is the amount won or lost in the simulation divided by the total of all bets. 1 billion rounds were run in this simulation.

This game variation is often called "Las Vegas Strip Rules". Some books actually list the expectation as 0.1% **for** the player, but this assumes 100% play of the shoe. At best, 2/3 penetration will be played, which lowers the expectation slightly.

Single2: D1, DAS, s17, DblAny

This action table comes with *Blackjack Counter* but had an incorrect entry prior to version 2.56. 99 versus dealer ace was listed as split; the correct strategy is stand. Installing this database corrects the problem. This Basic Strategy table corresponds to these casino rules:

- 1 deck.
- Double after splits allowed (DAS).
- Dealer stands on soft 17 (S17)
- Double on any first two dealt cards (DblAny).

99/A

You may find some Internet resources, namely http://www.bjmath.com, that suggests to split two nines versus a dealer ace **if the dealer hits soft 17 (H17)**. Detailed analysis in *Blackjack Audit* and *Statistical Blackjack Analyzer (SBA)* clearly show that this plays does **not** improve your game, with S17 or H17.

A7/A

In multi-deck games, Basic Strategy is the same for S17 and H17. This is not true for single deck games. Most resources indicate one (and only one) difference: Ace-Seven versus dealer Ace is stand in S17, and hit in H17.

Simulation Results

Your expectation for this game is **0.05%**, using flat betting and 2/3 shoe penetration (you will **win** on average 6 cents for each $100 bet). This data was derived using Blackjack Audit, a new simulation analysis program by DeepNet Technologies. The expectation is the amount won or lost in the simulation divided by the total of all bets. 1 billion rounds were run in this simulation.

Note that this is the only Blackjack game using only Basic Strategy where you can actually beat the casino! Prior to the popularity of card counting in the 60s, single deck games with these rule variations were not uncommon. Today, there are few games that play with such generous rules in single deck games.

Single3: D1, noDAS, h17, Dbl10-11

This Basic Strategy table corresponds to these casino rules:

- 1 deck.
- No double after splits allowed (noDAS).
- Dealer stands on soft 17 (S17).
- Double on a hard two card count of 10 or 11 only.

Simulation Results

Your expectation for this game is **-0.50%**, using flat betting and 2/3 shoe penetration (you will lose on average 40 cents for each $100 bet). This data was derived using [Blackjack Audit](#), a new simulation analysis program by DeepNet Technologies. The expectation is the amount won or lost in the simulation divided by the total of all bets. 1 billion rounds were run in this simulation.

Single4: D1, noDAS, h17, DblAny

This action table applies to the following casino rules:

- 1 deck.
- No double after splits (noDAS).
- Dealer hits on soft 17 (H17).
- Player may double any first two dealt cards (DblAny).

Simulation Results

Your expectation for this game is **-0.25%**, using flat betting and 2/3 shoe penetration (you will lose on average 24 cents for each $100 bet). This data was derived using [Blackjack Audit](#), a new simulation analysis program by DeepNet Technologies. The expectation is the amount won or lost in the simulation divided by the total of all bets. 1 billion rounds were run in this simulation.

Single5: D1, DAS, h17, DblAny

This action table applies to the following casino rules:

- 1 deck.
- Double after splits allowed (DAS).
- Dealer hits on soft 17 (H17).
- Player may double any first two dealt cards (DblAny).

The **only** difference between this table and "Single2: D1, DAS, s17, DblAny" is A7 versus dealer ace: hit, instead of stand. This is the only difference between H17 and S17 in single deck (there are no differences with multi-deck).

Simulation Results

Your expectation for this game is **-0.12%**, using flat betting and 2/3 shoe penetration (you will lose on average 11 cents for each $100 bet). This data was derived using [Blackjack Audit](#), a new simulation analysis program by DeepNet Technologies. The expectation is the amount won or lost in the simulation divided by the total of all bets. 1 billion rounds were run in this simulation.

Double1: noDAS, s17/h17

This action table applies to the following casino rules:

- 2 deck.
- No double after splits allowed (noDAS).
- Applicable for dealer hit or stand on soft 17 (same table for both).
- Player may double any first two dealt cards (DblAny).

Unlike single deck and multi-deck blackjack, there is very little agreement about the correct basic strategy tables for double deck games. Most published tables are a hybrid of the multi-deck and single deck games, with many 'edge' plays having different recommended actions. Disputed entries include: 8/5, 8/6, 11/A, A3/4, A7/2, A7/A, 66/7, 77/8, 77/10, 99/A.

All of the play choices we describe have been carefully tested against the alternatives in Blackjack Audit to ensure the maximum player expectation. Please see our book, Blackjack Count Master, for a detailed analysis on ideal double-deck basic strategy.

Simulation Results

Your expectation for this game is **-0.31%** for H17, and **-0.49%** for S17, using flat betting and 3/4 eight deck penetration. This data was derived using Blackjack Audit, a new simulation analysis program by DeepNet Technologies. The expectation is the amount won or lost in the simulation divided by the total of all bets. 1 billion rounds were run in this simulation. Please see our book, Blackjack Count Master, for a detailed analysis on ideal double-deck basic strategy.

Double2: DAS, s17/h17

This action table applies to the following casino rules:

- 2 deck.
- Double after splits allowed (DAS).
- Applicable for dealer hit or stand on soft 17 (same table for both).
- Player may double any first two dealt cards (DblAny).

Simulation Results

Your expectation for this game is **-0.36%** for S17, and **-0.19%** for H17, using flat betting and 3/4 eight deck penetration. This data was derived using Blackjack Audit, a new simulation analysis program by DeepNet Technologies. The expectation is the amount won or lost in the simulation divided by the total of all bets. 1 billion rounds were run in this simulation. Please see our book, Blackjack Count Master, for a detailed analysis on ideal double-deck basic strategy.

Selected Bibliography

Books

Note: all books listed here can be purchased at www.amazon.com.

- Carlson, Bryce. *Blackjack for Blood.*California: Pi Yee Press, 2001.

- Humble, Lance. *The World's Greatest Blackjack Book.* New York: Broadway Books, 2000.

- Tamburin, Henry. *Blackjack: Take the Money and Run.* North Carolina: Research Services Unlimited, 1998.

- Thorp, Edward. *Beat the Dealer.* New York: Random House, 1966.

- Uston, Ken. *Million Dollar Blackjack.* New Jersey : Carol Publish Group, 1996.

- Vancura, Olaf. *Knock-Out Blackjack.* Las Vegas: Huntington Press, 2000.

- Wong, Stanford. *Professional Blackjack.* Pi Yee Press, 1994.

Internet resources

- www.bju21.com: Free 'BJ Classes' with basic strategy tables, theory of counting, and rule variations. Also a great source for software and books.

- blackjack.casino.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.

- clubs.yahoo.com/clubs/blackjackcardcounterscafe: An active forum for serious players. Useful discussions on current casino conditions.