## Ultimate X 8/5 DDB Triple Play Simplified Strategy Approach for Jackpot Gents Viewers by paxOr



## Acknowledgements

Without the following resources available, this guide would not be possible with my own intuition. It has given me a better understanding of creating this guide to play Ultimate $X$ in a simplified manner.

- Wizard of Odds Ultimate X Page
- VideoPoker.com PRO Training
- Gary J Koehler academic paper on Ultimate X


## Agenda

- Understanding the Strategy Approach of Ultimate X using Single Hand Scenario
- The impossibility for any human player to achieve $100 \%$ optimal strategy
- Penalty of applying conventional 5 card strategy on Ultimate X
- Exploring the Wizard of Odds Singular Approach
- Two Pass Process
- Strategy Chart
- Strategy Exceptions between Conventional and Ultimate X based on Multiplier levels


## Understanding the Strategy Approach of Ultimate X using Single Hand Scenario

The core feature of Ultimate X Poker is that for every winning hand, the following hand is awarded a bonus multiplier. Consecutive wins could yield favorable results to the play. Some of the poker hand outcomes offer a bigger multiplier independent of rarity: 10X for Flush and 12X for Full House; but 2X for 4 of a Kind and Straight Flush.

Take for example, a deal with 4 cards to an outside straight along with a pair of 3 s . Conventional strategy in Double Double Bonus prefers the player to hold the low pair over the outside straight.


Although the expectation of a low pair is 0.87 Credits greater than 4 cards to an outside straight, the outside straight has a significant chance at a Straight outcome ( 8 out of 47 cards). The Straight offers a high multiplier $7 x$ ( $8 x$ for Multi-Hand) if it hits. Thus the value of getting a bonus multiplier is taken into account as "Multiplier Expected Value". The expected value is about "[Multiplier of Outcome Hand - 1] x [the average expected payout in 5 coin wager]". Both of these numbers are taken into account for the overall EV to determine the best hold, despite the Multiplier Expected Value is theoretical and nonpaying. There are many cases where the deal


In the same scenario, this time a $2 x$ Multiplier is present. The low pair will be the best hold for this deal scenario.


Take a 2 X Multiplier in the same scenario, this time the low pair will be the best hold. The Expected Value of the hold gets doubled, and it far exceeds the potential Multiplier Expected Value (MEV) from the 4 card outside straight provides.


The overall objective is to find suboptimal holds that yields the greatest multiplier potential for subsequent rounds, while weighing the cost of the current multipliers in place to determine if the
optimal holds outweigh the Multiplier Expected Value potential. There are also many instances that the optimal hold also yields the greatest Multiplier Expected Value.

## The Impossibility of playing Ultimate X 100\% Correctly

"If you want to memorize proper strategy, you will need a separate strategy for all possible total multipliers, and there are hundreds of possibilities between 3-play, 5-play, and 10-play. In my opinion, the number of players who will ever know strategy within $0.1 \%$ of optimal strategy, will be zero"

- Michael Shackleford in 2010

The Wizard of Odds page on Ultimate X (http://wizardofodds.com/ultimatex) shares an academic paper by Professor Gary J Koehler where Ultimate X optimal holds were solved using the Markov-Decision Problem. This is a linear algebra subject that a vast majority of people were not required to take for a degree in school. There are many different game states in which a combination of multiplier sets can appear, there are 30 different sets for the 3 -line 8/5 DDB. On top of that there are 2,598,960 ways to draw 5 cards from a 52 card with 134,459 unique deals types (Shackleford).

Take for example the following 2 draws:

## 4 - 5 - 10 J•A

$6 \$ 8$ 10•J•A\$
The multipliers of when to take the lone Ace or the Jack-Ten suited differentiates when there are Straight Penalties to the Ace (the 5) or the Jack-Ten suited (the 8)

Most people play Ultimate X for the thrill, it would be rather monotonous to study a very large strategy space to strive for perfection. A simple approach to the game is much necessary.

## Penalty of applying conventional 5 card strategy on Ultimate $X$

| Hand | Payout | Number of Possibilities | Odds | Return |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Royal Flush | 4000 | 64.86711818 | 1 in 40065.9081636612 | 0.099835501 |
| Straight Flush | 250 | 278.0721538 | 1 in 9346.35116837065 | 0.026748406 |
| 4 Aces with Any 2, 3, 4 | 2000 | 160.0440732 | 1 in 16239.0268382871 | 0.12316009 |
| 4 2s, 3s, 4s, w/ Ace, 2, 3, 4 | 800 | 372.1557418 | 1 in 6983.52788411922 | 0.114555281 |
| 4 Aces | 800 | 450.7821315 | 1 in 5765.44591817176 | 0.138757697 |
| 4 2s, 3s, 4s | 400 | 999.107903 | 1 in 2601.28059464852 | 0.153770416 |
| 4 5s thru Kings | 250 | 4242.252191 | 1 in 612.636845512541 | 0.408072093 |
| Full House | 40 | 28244.59485 | 1 in 92.0161897919312 | 0.434706111 |
| Flush | 25 | 28550.30054 | 1 in 91.0309156416735 | 0.274631973 |
| Straight | 20 | 33659.35553 | 1 in 77.2135995746954 | 0.259021728 |
| Three of a Kind | 15 | 195790.7645 | 1 in 13.2741705517791 | 1.130014108 |
| Two Pairs | 5 | 320034.797 | 1 in 8.12086693162393 | 0.615697812 |


| Jacks or Better | 5 | 551154.0269 | 1 in 4.7154876373899 | 1.060335724 |
| :---: | :---: | :---: | :---: | :---: |
| Nothing | 0 | 1434958.879 | 1 in 1.81117385122818 | 0 |
|  |  | 2598960 |  | 4.839306942 |

The conventional 8/5 DDB with optimal strategy played returns 4.839306942 Credits per 5 Credit wager for a return of 96.789\%

In 3 Play Ultimate X Poker, there are 30 possible totals of multipliers. Using linear algebra and matrix stabilization operation, taking a matrix of possibilities multiplied itself a billion times to come up with the transition rate.

The following is a breakdown of the multiplier state percentages (second column) the game goes through if it is under the assumption that the player uses conventional 5 card 8/5 Strategy throughout.

Note \#1: The Expected Return (third column) is a product of the Multiplier times the Expected Return of 4.839306942

Note \#2: The Total Return is the product of the Transition Rate percentage and the Expected Return to get the Expected Value. All 30 stages are added together.

| Transition |  |  |  | Expected <br> Multiplier |
| ---: | :--- | ---: | :--- | ---: |
| \%Rate | Return | Total Return |  |  |
| 3 | 0.272894913 | 14.51792083 | 3.961866741 |  |
| 4 | 0.150902752 | 19.35722777 | 2.921058941 |  |
| 5 | 0.152773224 | 24.19653471 | 3.696582617 |  |
| 6 | 0.139094787 | 29.03584165 | 4.03873421 |  |
| 7 | 0.063823136 | 33.87514859 | 2.162018216 |  |
| 8 | 0.057805477 | 38.71445553 | 2.237907569 |  |
| 9 | 0.052258396 | 43.55376248 | 2.276049767 |  |
| 10 | 0.026046755 | 48.39306942 | 1.260482423 |  |
| 11 | 0.006707519 | 53.23237636 | 0.357057176 |  |
| 12 | 0.031628948 | 58.0716833 | 1.836746251 |  |
| 13 | 0.004198671 | 62.91099024 | 0.26414255 |  |
| 14 | 0.00603547 | 67.75029719 | 0.408904886 |  |
| 15 | 0.000864067 | 72.58960413 | 0.062722281 |  |
| 16 | 0.004390481 | 77.42891107 | 0.339950163 |  |
| 17 | 0.004678989 | 82.26821801 | 0.384932087 |  |
| 18 | 0.010107092 | 87.10752495 | 0.880403769 |  |
| 19 | 0.000726545 | 91.94683189 | 0.066803511 |  |
| 20 | 0.003338849 | 96.78613884 | 0.323154303 |  |
| 21 | 0.002948263 | 101.6254458 | 0.299618542 |  |
| 22 | 0.000294978 | 106.4647527 | 0.03140476 |  |
| 23 | $1.13 \mathrm{E}-05$ | 111.3040597 | 0.001257736 |  |
| 24 | 0.004038111 | 116.1433666 | 0.468999806 |  |
| 25 | $6.44 \mathrm{E}-05$ | 120.9826735 | 0.007791284 |  |
| 26 | $5.09 \mathrm{E}-05$ | 125.8219805 | 0.006404339 |  |


| 27 | 0.000820817 | 130.6612874 | 0.107249006 |
| ---: | ---: | ---: | ---: |
| 28 | 0.000245156 | 135.5005944 | 0.033218784 |
| 30 | 0.002149549 | 145.1792083 | 0.312069822 |
| 32 | $3.39 \mathrm{E}-08$ | 154.8578221 | $5.24968 \mathrm{E}-06$ |
| 34 | $6.36 \mathrm{E}-09$ | 164.536436 | $1.04645 \mathrm{E}-06$ |
| 36 | 0.00136019 | 174.2150499 | 0.236965569 |

28.9845 credit return from a 30 credit per round wager equates to a $96.615 \%$ return，which is less than the $96.789 \%$ conventional return．

## Exploring Wizard of Odds Singular Strategy Approach

For reference，Shackleford suggested to use the Strategy Maker and input higher payouts so that the strategy can be more aggressive on certain payouts．
＂For each poker hand，determine：（adjusted win）$=2 \times$（base win）+ （multiplier）-1 ．For example，if the base win for a full house is 8 and the multiplier is 12 ，then the adjusted win is $2 \times 8+12-1=27$ ．＂

However，after experimentation and my observations on VideoPoker．com PRO Training，I felt that Shackleford＇s assigned values may be an overvaluation for the Multiplier EV compared to the VideoPoker．com PRO Training．

I have explored that the Multiplier Expected Value is about 4.8 per multiplier over 1x by dealing myself with a Straight Flush which awards $2 x$ ．Shackleford estimates are a full 5 credits which represents a video poker game paying $100 \%$ return．

14．4 Multiplier Expected Value for 3 lines，so it will be 4.8 per line．

| PROTraining |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Hold | Evo ${ }_{\text {wn }}^{\text {wiv }}$ |  | mum ${ }_{\text {nown }}^{\text {and }}$ |  |  | 3 |  |  |  | K．${ }^{\text {K．x．x }}$ |  |  |  |  | $\stackrel{2501}{+2001}$ |  |
| 3695］ | rementos | ${ }^{750}{ }^{750013}$ | 3x |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | ${ }^{67,392}+3$ |  | 3 x | － |  |  | 2553 +12911 | ${ }_{\substack{\text { a } \\+1933 \\+137}}$ | ， | 0 | 0 | 0 |  |  | （5339 |  |
| $33^{4} 95$ | 67,382 |  | 3 x | 0 | ， |  | －2539 |  | 0 | 0 | 0 | 0 | － |  |  |  |
| 3． 5 ¢6 | 45.192 |  | 3 3 | 0 |  | － | 127\％ | ${ }_{\text {c }}^{4255}$ | 1 | 。 | 0 | a | 0 |  |  |  |
|  | 45.192 |  | 3 x | 0 | ， | － | 127 <br> +6455 <br> 10 | ${ }_{\substack{4255 \\+22142}}$ | 0 | 0 | － | 0 |  |  |  |  |
| 3645 | 45.192 |  | ${ }^{3 \times}$ | 0 |  | － | ${ }_{1}^{127}$ | ${ }_{\substack{4255 \\+22142}}^{\substack{\text { 2 }}}$ | 0 | 0 | 0 | 0 | － |  |  |  |
| $55^{\text {5 }}$ \％ | 13.671 | ${ }_{\substack{50.688 \\+8.023}}$ | 3 x |  | 0.125 | 0．1．25 | O． 0.386 | ${ }_{\substack{0.284 \\+324}}^{\substack{\text { a }}}$ | 。 | 0 | 。 | 0 |  |  | ${ }_{\substack{0.231 \\+0.013}}$ |  |
| $33^{4} 5$ | 13.671 | $\underbrace{5 \times}_{\substack{50.688 \\ 40.023}}$ |  |  | 0．125 0 |  |  | ${ }_{\substack{0.824 \\+324}}$ | ○ | $\bigcirc$ | 0 | 0 | 0 |  | （0．231 |  |

Here is the HELP page with the Multipliers


I converted the number that is fitting to the Strategy Maker at Wizard of Odds.

| Hand | Weighted Formula | Weighted <br> Value | WoO Strategy Maker Entry |
| :---: | :---: | :---: | :---: |
| Royal Flush | $4000+4.8$ | 4004.8 | 800.96 |
| Straight Flush | $250+4.8$ | 254.8 | 50.96 |
| 4 Aces with Any 2, 3, 4 | $2000+4.8$ | 2004.8 | 400.96 |
| $\begin{gathered} 42 \mathrm{~s}, 3 \mathrm{~s}, 4 \mathrm{~s}, \mathrm{w} / \text { Ace, } 2,3 \\ 4 \end{gathered}$ | $800+4.8$ | 804.8 | 160.96 |
| 4 Aces | $800+4.8$ | 804.8 | 160.96 |
| 42 s , 3s, 4s | $400+4.8$ | 404.8 | 80.96 |
| 45 thru Kings | $250+4.8$ | 254.8 | 50.96 |
| Full House | $40+11 * 4.8$ | 92.8 | 18.56 |
| Flush | $25+9 * 4.8$ | 68.2 | 13.64 |
| Straight | $20+7 * 4.8$ | 53.6 | 10.72 |
| Three of a Kind | $15+3 * 4.8$ | 29.4 | 5.88 |
| Two Pairs | $5+2 * 4.8$ | 14.6 | 2.92 |
| Jacks or Better | $5+4.8$ | 9.8 | 1.96 |
| Nothing | 0 | 0 | 0 |

The Wizard of Odds Video Poker Strategy Maker can be found here:
https://wizardofodds.com/games/video-poker/strategy/calculator/

## Video Poker Hand Analyzer

| Introduction |  |  |
| :---: | :---: | :---: |
|  | Paytable |  |
|  | hand | PRIZE |
|  | Royal Flush | 800.96 |
|  | Straight Flush | 50.96 |
|  | Four Aces with any 2,3,4 | 400.96 |
|  | Four 2's, 3's, 4's with any A, 2,3,4 | 160.96 |
|  | Four Aces | 160.96 |
|  | Four 2's, 3's, 4's | 80.96 |
|  | Four 5's through K's | 50.96 |
|  | Full House | 18.56 |
|  | Flush | 13.64 |
|  | Straight | 10.72 |
|  | Three of a Kind | 5.88 |
|  | Two Pair | 2.92 |
|  | Jacks or Better | 1.96 |
|  | , |  |
|  | Continue |  |

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Direct Link to the Strategy results created:
https://wizardofodds.com/games/video-poker/strategy/a-1-b-57-c-1-d-0-d-1.96-d-2.92-d-5.88-d-10.72-d-13.64-d-18.56-d-50.96-d-80.96-d-160.96-d-160.96-d-400.96-d-50.96-d-800.96/

The abbreviated strategy yields the following payout

| Hand | Payout | Number of Possibilities | Odds | Return |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Royal Flush | 4000 | 49.1024308 | 1 in 52929.3551789488 | 0.07557243 |
| Straight Flush | 250 | 272.2073485 | 1 in 9547.72166884866 | 0.026184257 |
| 4 Aces with Any 2, 3, 4 | 2000 | 130.5886985 | 1 in 19901.8753514062 | 0.100493042 |
| 4 2s, 3s, 4s, w/ Ace, 2, 3, 4 | 800 | 368.2770061 | 1 in 7057.07920187247 | 0.113361346 |
| 4 Aces | 800 | 365.2622139 | 1 in 7115.3267454475 | 0.112433347 |
| 4 2s, 3s, 4s | 400 | 993.0024154 | 1 in 2617.27460056913 | 0.152830735 |
| 4 5s thru Kings | 250 | 4183.106282 | 1 in 621.299059778568 | 0.402382711 |


| Full House | 40 | 29337.24126 | 1 in 88.5891068342541 | 0.451522782 |
| :---: | :---: | :---: | :---: | :---: |
| Flush | 25 | 37888.68734 | 1 in 68.5946170903912 | 0.364460085 |
| Straight | 20 | 41222.01003 | 1 in 63.0478717102213 | 0.317219273 |
| Three of a Kind | 15 | 186980.2641 | 1 in 13.8996487824743 | 1.079163958 |
| Two Pairs | 5 | 323058.9776 | 1 in 8.04484685445684 | 0.621515871 |
| Jacks or Better | 5 | 502872.3449 | 1 in 5.16823012109044 | 0.967449181 |
| Nothing | 0 | 1471238.928 | 1 in 1.76651116953167 | 0 |

4.784589 Credit return for a 5 Credit wager will yield a 95.692\% payout which is little more than $1 \%$ from the optimal holds.

Using Matrix stabilization, the Transition \% Rates are higher than the conventional strategy on the higher multiplier levels. This will yield a higher overall Expected Value.

| Multiplier | Transition \% Rate | Expected Return | Total Return |
| :---: | :---: | :---: | :---: |
| 3 | 0.296881075 | 14.35376706 | 4.261361791 |
| 4 | 0.137436354 | 19.13835608 | 2.63030589 |
| 5 | 0.13947942 | 23.9229451 | 3.336758501 |
| 6 | 0.127835343 | 28.70753412 | 3.66983746 |
| 7 | 0.058261786 | 33.49212314 | 1.951310926 |
| 8 | 0.054698896 | 38.27671216 | 2.093693883 |
| 9 | 0.056799155 | 43.06130118 | 2.445845501 |
| 10 | 0.032176987 | 47.8458902 | 1.539536575 |
| 11 | 0.007136489 | 52.63047922 | 0.375596855 |
| 12 | 0.03805163 | 57.41506823 | 2.184736909 |
| 13 | 0.006194345 | 62.19965725 | 0.385286166 |
| 14 | 0.006172743 | 66.98424627 | 0.413476558 |
| 15 | 0.000802471 | 71.76883529 | 0.057592378 |
| 16 | 0.004183188 | 76.55342431 | 0.320237367 |
| 17 | 0.005391496 | 81.33801333 | 0.438533533 |
| 18 | 0.011656255 | 86.12260235 | 1.003867038 |
| 19 | 0.000701763 | 90.90719137 | 0.063795261 |
| 20 | 0.003310924 | 95.69178039 | 0.316828182 |
| 21 | 0.003554452 | 100.4763694 | 0.357138447 |
| 22 | 0.000416388 | 105.2609584 | 0.043829374 |
| 23 | $1.87 \mathrm{E}-05$ | 110.0455475 | 0.002055838 |
| 24 | 0.004076602 | 114.8301365 | 0.468116722 |
| 25 | $6.28 \mathrm{E}-05$ | 119.6147255 | 0.007510399 |
| 26 | $4.87 \mathrm{E}-05$ | 124.3993145 | 0.006056645 |
| 27 | 0.000965583 | 129.1839035 | 0.124737802 |
| 28 | 0.000243424 | 133.9684925 | 0.032611207 |


| 30 | 0.002183192 | 143.5376706 | 0.313370303 |
| ---: | ---: | ---: | ---: |
| 32 | $2.35 \mathrm{E}-08$ | 153.1068486 | $3.59507 \mathrm{E}-06$ |
| 34 | $3.70 \mathrm{E}-09$ | 162.6760267 | $6.02471 \mathrm{E}-07$ |
| 36 | 0.001475437 | 172.2452047 | 0.25413703 |

29.09816874 Credit Return for the 30 Credit Wager yields a $96.994 \%$ return which is higher than the conventional 8/5 DDB payout, however it is still less than its theoretical return.

Optimal Returns from VideoPoker.com
3-Play: 97.227\%
5-Play: 97.286\%
10-Play: 97.352\%

Simplified Returns without Exceptions played
3-Play: 96.994\% (30 Multiplier States)
5-Play: 97.045\% (52 Multiplier States)
10-Play: 97.132\% (107 Multiplier States)

## Two Pass Approach

The singular Ultimate $X$ strategy was compared against the optimal conventional 8/5 DDB strategy. For all differing scenarios, a manual analysis was done on VideoPoker.com PRO Training using trial and error to see at what Multiplier levels the optimal holds are more valuable than sub-optimal high Multiplier EV hold. There is the Exception section below the strategy section of when the multiplier can possibly be high enough to play the conventional strategy than the suboptimal strategy. The more these exceptions are executed, the closer to the overall return the player can achieve.

## Strategy Chart

## IMPORTANT NOTES:

This singular strategy can be used to play $8 / 5$ DDB in $3 / 5 / 10$ play formats:

- 3-Play: 96.994\% (30 Multiplier States)
- 5-Play: 97.045\% (52 Multiplier States - offers 3x Multiplier 45 thru Kings)
- 10-Play: 97.132\% (107 Multiplier States - offers 3x Multiplier 45 s thru Kings + offers $4 x$ Multiplier for the other Quads / Straight Flush / Royal Flush)

The indication "(ex)" meaning an Exception between conventional and Ultimate $X$ strategy. There is the Exception section below of when the multiplier can possibly be high enough to play the conventional strategy rather than the suboptimal strategy. It is rather important to look at the Exceptions for the higher part of the chart (with lower numbered step) as those can have high Expected Values with the slightest multiplier changes.

1. Dealt 4 of a Kind, Straight Flush, Royal Flush
2. 4 to Royal Flush
3. (ex) Full House
4. 3 of a Kind: Aces
5. Flush
6. 3 of a Kind: $2 s, 3 s, 4 s$
7. Straight
8. 3 of a Kind: 5 s thru Kings
9. 4 to Outside Straight Flush
10. (ex) Two Pairs
11. 4 to Inside Straight Flush (with 1 Gap)
12. Pair of Aces
13. Pair of Jacks, Queens, or Kings
14. 4 to Flush
15. (ex) 3 to Royal Flush
a. 4 to Flush $[\mathrm{A} \bullet 3 \bullet \mathrm{~J} \bullet \mathrm{Q} \bullet$ ]
b. 4 to Straight $[10 \bullet \mathrm{Q} \bullet \mathrm{K} \bullet \mathrm{J}$ ]
c. Normal $[10 \& J \& K \$]$
16. (ex) 4 to Outside Straight
17. Pair of $2 \mathrm{~s}, 3 \mathrm{~s}, 4 \mathrm{~s}$
18. Pair of 5 s thru 10 s
19. 3 to Straight Flush: 9TJ / 9JQ
20. 4 to Inside Straight with 4 High Cards: JQKA
21. 3 to Straight Flush: 8TJ / 8JQ / 9JQ / 9JK / 9QK
22. 3 to Straight Flush with No High Cards and No Gaps excludes Ace - Low
23. 4 to Inside Straight with 3 High Cards
24. (ex) 2 to Royal Flush JQ / JK / QK
25. 4 to Inside Straight with 2 High Cards
26. (ex) 3 to Flush with 2 High Cards
27. (ex) 2 to Royal Flush JA / QA / KA
28. 3 to Straight Flush with No High Cards and 1 Gap includes Ace - Low
29. 3 to Straight Unsuited TJQ / JQK (At ALL multiplier exception)
30. (ex) 4 to Inside Straight Ace-Low (A234 / A235 / A245 / A345)
31. (ex) 4 to Inside Straight with 1 High Card Jack or Queen [9 $\bullet 10 \vee Q \vee 8$ ]
32. Unsuited JQ
33. (ex) 2 to Royal Flush TJ
34. (ex) Unsuited JK / QK
35. (ex) 3 to Flush with 1 High Cards [5 • $10 \bullet$ Q $\bullet$ ]
36. Ace only
a. If exists, 3 to Flush with Ace / King [ $3 \vee 10 \vee \mathrm{~A} \bullet$ ]
37. 2 to Royal Flush TQ / TK
38. (ex) Jack, Queen, King only
a. Unsuited JA / QA / KA with other 3 cards with 2 thru 10. The 10 must be unsuited with the 2 High Cards
b. 3 to Flush with a High Card Jack / Queen / King [3 $\vee \bullet \mathrm{J} \bullet$ ]
39. (ex) 3 to Inside Straight Flush with 2 Gaps and No High Cards [5 $7 \bullet 9$ ]
40. 4 to Inside Straight with No High Cards [5•9•8*64]
41. (ex) 3 to Flush with No High Cards [2• $4 \bullet 7 \bullet$ ]
42. Discard All

## Strategy Exceptions between Conventional and Ultimate X based on Multiplier levels

Note \#1: Add up all the Multipliers on the board to see if conventional optimal hold strategy is played.
For hands with no multiplier labels on it, it counts as " $1 x$ "
Note \#2: Former portion is the conventional 5 Card 8/5 DDB strategy hold. Latter portion is the Ultimate X 8/5 DDB Strategy hold.

- Step 4-3 of a Kind Aces vs Full House (Aces Full - A $5 \bullet A \bullet A \not 5$ )
- Conventional Strategy 3 of a Kind Aces is held at:
- 3-Play: $5 x$ Total Multiplier and up
- 5-Play: $8 x$ Total Multiplier and up
- 10-Play: 16x Total Multiplier and up
- Step 10 - Ace Pair vs Two Pairs (with one of the Pairs with Aces - A $\bullet \bullet A \vee 8 \diamond$ )
- Conventional Strategy Ace Pair is held at:
- 3-Play: $12 x$ Total Multiplier and up
- 5-Play: 19x Total Multiplier and up
- 10-Play: 38x Total Multiplier and up
- Step 15a-3 to Royal Flush vs 4 to Straight TJQK (with 3 to Royal - $10 \bullet \mathrm{~J} \bullet \mathrm{~K} \bullet$ )
- Conventional Strategy 3 to Royal Flush is held at:
- 3-Play: $4 x$ Total Multiplier and up
- 5-Play: 7x Total Multiplier and up
- 10-Play: $14 x$ Total Multiplier and up
- Step 15b-3 to Royal Flush vs 4 to Flush (with 3 to Royal - $6 \bullet 10 \bullet J \bullet Q \bullet$ )
- Conventional Strategy 3 to Royal Flush is held at:
- 3-Play: 13x Total Multiplier and up
- 5-Play: 22x Total Multiplier and up
- 10-Play: $44 x$ Total Multiplier and up
- Step 16 - Pair of $2 \mathrm{~s}, 3 \mathrm{~s}, 4 \mathrm{~s}$ vs 4 to Outside Straight (with 2, 3, 4-4•4 $3 \bullet 5 \bullet 6 \vee$ )
- Conventional Strategy Pair of $2 \mathrm{~s}, 3 \mathrm{~s}, 4 \mathrm{~s}$ is held at:
- 3-Play: 7x Total Multiplier and up
- 5-Play: $12 x$ Total Multiplier and up
- 10-Play: $24 x$ Total Multiplier and up
- Step 16 - Pair of 5s thru 10s vs 4 to Outside Straight (5 5 2 344 )
- Conventional Strategy Pair of 5 s thru 10 s is held at:
- 3-Play: 30x Total Multiplier and up
- 5-Play: 48x Total Multiplier and up
- 10-Play: 96x Total Multiplier and up
- Step 24 - Two Suited High Cards vs 4 to Inside Straight (with Suited High Cards - J Q Q $8 \vee 9 \diamond$ )
- Conventional Strategy Two Suited High Cards is held at:
- 3-Play: $4 x$ Total Multiplier and up
- 5-Play: 6x Total Multiplier and up
- 10-Play: $12 x$ Total Multiplier and up
- Step 24 - Suited JQ vs 4 to Inside Straight with 3 High Cards (with Suited JQ - $10 \bullet J \vee Q \vee A \&$ )
- Conventional Strategy Suited JQ is held at:
- 3-Play: 28x Total Multiplier and up
- 5-Play: 47x Total Multiplier and up
- 10-Play: 94x Total Multiplier and up
- Step 26 - Two Suited High Cards vs 3 to Flush (with Suited High Cards - $6 \bullet J \bullet K \bullet$ )
- Conventional Strategy Two Suited High Cards is held at:
- 3-Play: 5x Total Multiplier and up
- 5-Play: $8 x$ Total Multiplier and up
- 10-Play: $16 x$ Total Multiplier and up
- Step 27 - Suited JA / QA vs 89JQ Inside Straight $(\mathrm{A} \bullet 8 \bullet 9 \vee J \& Q \bullet$ drawn - $\mathrm{A} \bullet \mathrm{Q} \bullet$ vs $8 \vee 9 \vee J$ $\$$ Q ${ }^{*}$
- Conventional Strategy Suited JA / QA is held at:
- 3-Play: $8 x$ Total Multiplier and up
- 5-Play: $12 x$ Total Multiplier and up
- 10-Play: $24 x$ Total Multiplier and up
- Step 30 - Ace vs 4 to Inside Straight Ace-Low (2 $3 \vee 4 \vee$ A
- Conventional Strategy Ace is held at:
- 3-Play: 10x Total Multiplier and up
- 5-Play: 16x Total Multiplier and up
- 10-Play: 32x Total Multiplier and up
- Step 31 - Ace vs Inside Straight with a High Card (8 $10 \vee Q \leqslant 9$ )
- Conventional Strategy Ace is held at:
- 3-Play: 10x Total Multiplier and up
- 5-Play: 16x Total Multiplier and up
- 10-Play: 32x Total Multiplier and up
- Step 31 - Jack vs 4 to Inside Straight Jack-High ( $9 \bullet 10 \bullet 7 \leqslant$ J )
- Conventional Strategy Jack is held at:
- 3-Play: 17x Total Multiplier and up
- 5-Play: $28 x$ Total Multiplier and up
- 10-Play: 56x Total Multiplier and up
- Step 31 - Queen vs 4 to Inside Straight Queen-High (Q 8 \& 9 - 10 )
- Conventional Strategy Queen is held at:
- 3-Play: 20x Total Multiplier and up
- 5-Play: 32x Total Multiplier and up
- 10-Play: $64 x$ Total Multiplier and up
- Step 33 - Suited TJ vs 4 to Inside Straight (with Suited TJ - $7 \bullet 9 \bullet 10$ J $\downarrow$ )
- Conventional Strategy Suited TJ is held at:
- 3-Play: 9x Total Multiplier and up
- 5-Play: 15x Total Multiplier and up
- 10-Play: 30x Total Multiplier and up
- Step 33 - Ace vs Suited TJ
- Conventional Strategy Ace is held at:
- 3-Play: 20x Total Multiplier and up
- 5-Play: 34x Total Multiplier and up
- 10-Play: $68 x$ Total Multiplier and up
 \$)
- Conventional Strategy Unsuited JK is held at:
- 3-Play: 10x Total Multiplier and up
- 5-Play: $16 x$ Total Multiplier and up
- 10-Play: 32x Total Multiplier and up
- $\quad$ Step 34 - Ace vs Unsuited JA / QA / KA
- Conventional Strategy Ace is held at:
- 3-Play: 4x Total Multiplier and up
- 5-Play: 6x Total Multiplier and up
- 10-Play: $12 x$ Total Multiplier and up
- $\quad$ Step 34 - Ace vs Unsuited JK / QK
- Conventional Strategy Ace is held at:
- 3-Play: 18x Total Multiplier and up
- 5-Play: 31x Total Multiplier and up
- 10-Play: 62x Total Multiplier and up
- Step 35 - Ace vs 3 to Flush with 1 High Card ( $5 \bullet 10 \bullet \mathrm{Q} \bullet$ )
- Conventional Strategy Ace is held at:
- 3-Play: $4 x$ Total Multiplier and up
- 5-Play: 6x Total Multiplier and up
- 10-Play: $12 x$ Total Multiplier and up
- Step 35 - Suited TQ vs 3 to Flush (with Suited TQ-7•10 Q Q)
- Conventional Strategy Suited TQ is held at:
- 3-Play: 6x Total Multiplier and up
- 5-Play: 9x Total Multiplier and up
- 10-Play: 18x Total Multiplier and up
- Step 38b - High Card Jack, Queen, King vs 3 to Flush (with High Card - 2 •6 J $\downarrow$ )
- Conventional Strategy High Card Jack, Queen, King is held at:
- 3-Play: 5x Total Multiplier and up
- 5-Play: $8 \times$ Total Multiplier and up
- 10-Play: $16 x$ Total Multiplier and up
- Step 39-3 to Straight Flush with 2 Gaps vs 4 to Inside Straight with No High Cards (2• 3 - 6 • 4 )
- Conventional Strategy 3 to Straight Flush is held at:
- 3-Play: $8 \times$ Total Multiplier and up
- 5-Play: $14 x$ Total Multiplier and up
- 10-Play: $28 x$ Total Multiplier and up
- Step 41 - Discard All vs 3 to Flush with No High Cards ( $3 \bullet 7 \bullet 10 \bullet$ )
- Conventional Strategy Discard All is held at:
- 3-Play: $8 \times$ Total Multiplier and up
- 5-Play: $11 x$ Total Multiplier and up
- 10-Play: $22 x$ Total Multiplier and up
- Step 29 Unsuited JQ vs 3 to Straight TJQ $(Q \bullet 10 * J$ )
- Conventional Strategy is NEVER Played for this case

