

# **PROMOTIONAL PACKET**



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Dear Sir or Madam,

We respectfully submit this letter of intent to your casino on behalf of Romito Gaming requesting consideration for a Field Trial of Ace Odd Even<sup>®</sup>. Your support would provide the foundation for seeking final regulatory approval from the Nevada Gaming Commission and provide the opportunity for you to showcase a new and exciting game.

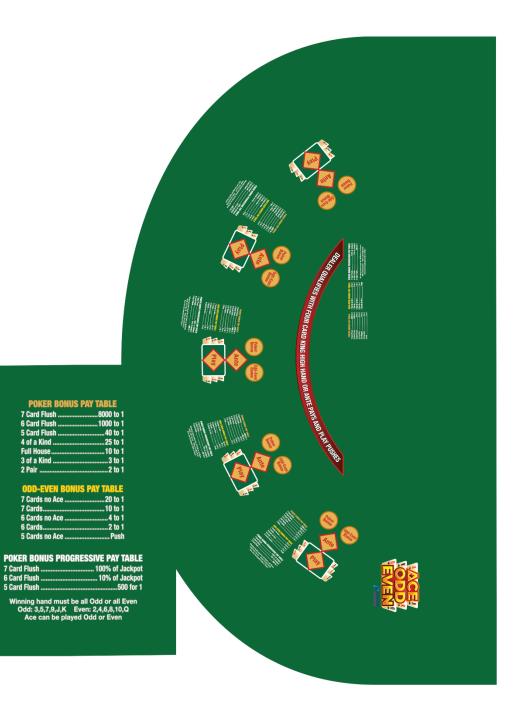
Ace Odd Even<sup>®</sup> was conceived by Bob Schotzinger after a trip to Atlantic City. It seemed that most table games were blackjack or poker based, and many were difficult to learn or intimidating for players. Bob set out to develop a game that was simple, fun and did not require detailed knowledge of standard casino games.

We understand hosting a field trial does not come without challenges. We would appreciate the opportunity to demonstrate how Ace Odd Even<sup>®</sup> will benefit your casino's bottom line. Through this packet and live demonstration, we hope to prove Ace Odd Even<sup>®</sup> will be a fresh and profitable addition to your table game lineup. The game has been validated by GLI<sup>®</sup> and is easy to implement as it uses standard equipment. We expect the easy-to-learn rules and strategy will appeal to a wide range of players. Our partnership will lead the table game market in setting new standards in game innovation.

Thank you for your consideration. We look forward to partnering with your casino. If you would like to schedule a live demo or require additional information regarding Ace Odd Even<sup>®</sup>, please feel free to contact me or Bob Schotzinger at Romito Gaming, LLC at (919) 271-8112 or bob@romitogaming.com. We look forward to hearing from you.

Sincerely, Heather Ferris Vegas Aces Services, LLC Marketing Team for Romito Gaming 304 S. Jones Blvd. #3585 Las Vegas, NV 89107 <u>Heather@Vegas-Aces.com</u>

# Felt Layout



# Photo Gallery





# The Story Behind the Game



Romito Gaming was formed by the father and son team of Bob, Mike and Tom Schotzinger to develop and market their novel table games. Bob is a biotechnology CEO and serial entrepreneur, Mike is a Venture Capitalist and Tom is a CPA, but they all share a passion for gaming and mathematics. Their varied background and experiences allow them to bring a fresh and unique perspective to the field of gaming.

Ace Odd Even<sup>®</sup> was conceived by Bob after visiting Atlantic City. It seemed that most table games were blackjack or poker based, and many were difficult to learn or intimidating for players. Bob set out to develop a game that was simple, fun and did not require detailed knowledge of standard casino games. While examining a deck of cards, it occurred that in addition to the cards having a suit, color, and rank, the cards could also be odd or even. The idea for the game was born.

Bob brought the original game concept to Mike and Tom, who added further refinements and improvements. Finally, Bob enlisted the assistance of several gaming experts including mathematician Joe Shipman and attorney Rich Newman to help validate the game. The upshot is a game that is unique, fun, easy to learn and accessible for all players. Ace Odd Even<sup>®</sup> is now ready for its first field trial!



# **Rules of Play**

Ace Odd Even<sup>®</sup> is a unique new game that is both fun and easy to learn! The object of the game is to build a hand that has more **all odd** or **all even** cards than the dealer's best hand. The player is only playing against the dealer and no other players. Ace Odd Even<sup>®</sup> is played with a single standard 52-card deck.

#### How to Play the Game

The player places their initial mandatory wager in the Ante betting space to begin the round. The player can also place optional Odd-Even Bonus and Poker Bonus side bets at this time. Each player and the dealer are dealt seven cards face down. The player then examines their cards with a goal of building a hand that contains the greatest number of **all odd** or **all even** cards.

Odd Cards: 3, 5, 7, 9, Jack, King Even Cards: 2, 4, 6, 8, 10, Queen Aces can be played as either odd or even

Once the hand is built, the player chooses to continue playing or fold. If the player chooses to play, they put their best all odd or all even hand in the Play box and place an additional wager, equal to the Ante, on top of the cards. Any cards that are not a part of the played hand are discarded face down in the empty space to the right of the Ante wager. If the player decides to fold, the entire hand is discarded and the Ante wager is forfeited.

### **Optimal Player Strategy**

The optimal strategy for players is to make the Play bet with a 4-card, Ace-high hand or better. Following this strategy, the player is expected to fold 32.15% of the time and the house edge is 3.21% of the ante.

#### How to Win

Once players have decided to play or fold, the dealer exposes their seven cards and builds the best **all odd** or **all even** hand. Dealer qualifies with a 4-card, King-high hand or better. If the dealer does not qualify, players receive even money on the Ante wager and the Play wager pushes.

If the dealer qualifies, the player and dealer hands are compared. The winning hand is the hand with the greatest number of cards. If the player wins, the Ante and Play wagers are paid even money. If the dealer wins, the Ante and Play wagers are collected. If the number of odd or even cards are the same, the highest-ranking card decides the winner. If these

cards tie, then the second highest-ranking cards are compared and so forth. Ace is the highest-ranking card. If all cards match, the Ante and Play wagers push.

#### **Side Bets**

The Odd-Even Bonus is an optional side bet that pays if the player has a hand of six or more all odd or even cards.

#### Odd-Even Bonus Pay Table

7 Cards No Ace	 20 to 1
7 Cards	 10 to 1
6 Cards No Ace	 4 to 1
6 Cards	 2 to 1
5 Cards No Ace	 Push

The Poker Bonus is an optional side bet that pays based on poker rankings. Winning hands must contain all odd or even cards. This bet is paid even if the player folds. Discards can be used to form a winning hand (i.e., if the player discards a Five, Five, Five, it counts as 3 of a Kind). If the player has more than one poker ranking, only the highest is paid.

#### Poker Bonus Pay Table

00 to 1
00 to 1
40 to 1
25 to 1
10 to 1
3 to 1
2 to 1

# Benefits

Ace Odd Even<sup>®</sup> is a unique table game that provides a wide range of advantages to both the player and the casino.

### Player

- Easy rules and simple optimal strategy
- Not intimidating for new players
- No knowledge of other table games needed
- Fair odds for main game with a house edge of 3.21% of the ante
- Enticing, high-payout potential for side bets!

### Casino

- Fresh new game concept; simple rules and player strategy will appeal to a wide range of players!
- Easy for dealers to learn; procedures are very similar to established games such as High Card Flush or I Luv Suits
- Standard equipment used
- Two side bets that offer a favorable house edge to the casino. The Odd-Even Bonus has a house edge of 7.61% and the Poker Bonus has a house edge of 7.26%
- Progressive option available
- Math analysis by GLI

# **Dealer's Policies & Procedures**

Ace Odd Even<sup>®</sup> is played with a single standard 52-card deck. The object of the game is to build a hand that has more **all odd** or **all even** cards than the dealer's best hand. In Ace Odd Even<sup>®</sup>, players compete against the dealer on an individual basis. Please reference your employee handbook for more information on opening or closing a table, completing a house shuffle, or any other policies or procedures that are not covered in this manual.

### **Placing a Bet**

To begin the game, the player must place their initial mandatory wager in the main Ante betting diamond. At the same time, they can choose to play the optional Odd-Even Bonus or Poker Bonus side bets. These side bet wagers do not need to match the Ante; however, they cannot be played by themselves. Scan the layout to make sure that there are no players betting under the table minimum or over the table maximum and that all cheques are stacked correctly before delivering the first card. Once the first card has left the shoe, no changes can be made to the player's bet. Players are not allowed to play their hand blind.

If the player places a toke wager on the Ante, they have the option of placing an equivalent toke wager on the Play as well. However, the player cannot place a toke wager on the Play alone. A toke wager can be placed on the Odd-Even and Poker Bonuses; however, verify with your casino on the maximum amount, as some casinos cap this at \$25.

## **Dealing the Hand**

The dealer will quickly riffle the deck, before placing the cards in the automatic shuffler. After pressing the green button, the cards will come out in stacks, so each player and the dealer will receive seven cards. If the automated shuffler is broken or unavailable, the dealer will do a hand shuffle, per house way. The dealer will place a stack of seven cards, facedown, in front of the player, spreading them far enough that the eye-in-the-sky can see them.

The cards will be dealt in a clockwise rotation, starting from the dealer's left-hand side and going right. Once everyone has been given their hand, the dealer will place the remaining cards in the discard rack. If a player is dealt an incorrect number of cards, notify your floor supervisor immediately. This hand is void and no money shall be exchanged.

### **Player Options**

The player will examine their cards with a goal of building a hand that contains the greatest number of **all odd** or **all even** cards.

Odd Cards: 3, 5, 7, 9, Jack, King

Even Cards: 2, 4, 6, 8, 10, Queen

Aces can be played as either odd or even.

Once the hand is built, the player will choose whether to continue playing or fold. If the player chooses to play, they will put their best all odd or all even hand face down in the Play box and place an additional wager, equal to the Ante, on top of the cards. Any cards that are not a part of the played hand will be discarded and placed face down in the empty space to the right of the Ante wager. The dealer will spread these cards for the cameras, before placing them in the discard rack. There is no recourse for players who discard the wrong cards.

If the player decides to fold, and there is no winning Poker Bonus ranking, the player will signal a fold by placing their entire deck face down to the player's right of the Ante betting diamond, with no additional Play wager. When the dealer sees this, they will collect the player's Ante and Bonus bets and secure them in their bank. They will then verify to the eye-in-the-sky that all seven cards are there before placing them in the discard rack. If the player elects to fold, but they have a winning Poker Bonus ranking, the player will slide their poker ranking face down under the Poker Bonus bet and no additional wagers are needed. The rest of the hand will be discarded and placed face down in the empty space to the right of the Ante.

If players are sharing information about their hand with other players, gently remind them they are not allowed to do this. If they continue, call your floor supervisor.

### **Take-and-Pay Procedure**

Once all players have made their decision, it is the dealer's turn. The dealer will expose their seven cards. When laying the cards out, the dealer will put a space in between them so that they can be seen clearly by the floor and the cameras. The dealer will build the best **all odd** or **all even** hand possible. The dealer qualifies with a 4-card, King-high hand or better. The dealer will place their discarded cards face up, above their qualifying hand. The dealer will announce their hand to the table, e.g., "5-card Even, King high." The winning hand is the hand that has more all odd or all even cards. Players are only playing against the dealer and not against any of the other players. Starting from the dealer's

right-hand side and moving in a counterclockwise rotation, the dealer will determine which players have a winning hand.

If the dealer qualifies, and the player wins, the Ante and Play wagers are paid even money. If the dealer wins, the Ante and Play wagers lose, and the bets are collected and placed in the bank. If the dealer and the player have the same number of all odd or all even cards, the winning hand is determined by the highest-ranking card, with ace being the highestranking card and two the lowest. If these cards tie, then the next highest-ranking cards are compared and so forth. If all cards are identical, this is a tie, and the Ante and Play wagers push and no money is exchanged.

If the dealer does not qualify, they will leave all cards face up and turned slightly diagonal, indicating to the cameras that no cards will be used. All players will receive even money on their Ante wager and their Play wager will push. If the player has no Play wager, and they have a poker ranking, the Ante will automatically lose and the Poker Bonus will be paid according to the posted pay table. The house edge is 3.2% of the Ante.

### **Odd-Even Bonus Side Bet**

The Odd-Even Bonus is an optional side bet that pays if the player has a hand of six or more **all odd** or **all even** cards. The dealer will pay via the associated pay table. During the take-and-pay procedure, the dealer will resolve the Odd-Even Bonus side bet after they take-or-pay the main Ante and Play wagers.

#### Odd-Even Bonus Pay Table

7 Cards No Ace	 20 to 1
7 Cards	 10 to 1
6 Cards No Ace	 4 to 1
6 Cards	 2 to 1
5 Cards No Ace	 Push

### **Poker Bonus Side Bet**

The Poker Bonus is an optional side bet that pays based on poker rankings. As with the main game, winning hands must also contain **all odd** or **all even** cards. During the takeand-pay procedure, the dealer will resolve the Poker Bonus side bet after they take-orpay the main Ante and Play wagers. Discards can be used to form a winning hand (i.e., if the player elects to play the main hand but discards a Five, Five, Five, it counts as 3 of a Kind). This bet is paid even if the player folds. The player will slide their poker ranking face down under the Poker Bonus bet and no additional wagers are needed. The rest of the hand will be discarded and placed face down in the empty space to the right of the Ante. During the take-and-pay procedure, the dealer will fan the cards so the eye-in-the-sky can see and verify that this is a winning hand. The Ante will automatically lose and the Poker Bonus will be paid according to the posted pay table, before placing their cards in the discard rack. If the player has more than one poker ranking, only the highest is paid.

### Poker Bonus Pay Table

7 Card Flush	 8,000 to 1
6 Card Flush	 1,000 to 1
5 Card Flush	 40 to 1
4 of a Kind	 25 to 1
Full House	 10 to 1
3 of a Kind	 3 to 1
2 Pair	 2 to 1

Once each player's hand has been resolved, and all wagers decided, the dealer will collect the cards and place them in the discard rack. The next hand will begin.

# **Independent Math Analysis**





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International Offices GLI Africa GLI Asia GLI Australia Pty Ltd GLI Austria GmbH GLI Europe BV GLI Italy GLI South America 19 May 2023

Mr. Robert J. Schotzinger 7000 Potomac Court Raleigh, North Carolina 27613

Scope: Mathematical Analysis of Ace Odd Even

File Number: LO-394-RJS-23-01

Evaluating Location	
GLI-1	

Nevada Registration Number: 31668-01

Dear Mr. Schotzinger,

As per Robert J. Schotzinger's request, please find **Gaming Laboratories International, LLC's (GLI)** analysis of the table game Ace Odd Even, to be submitted to and reviewed by the Nevada Gaming Control Board for determination as to its suitability.

#### **Game Description**

Ace Odd Even is a table game played with a single deck of standard playing cards. Gameplay initiates after the player places an Ante wager as well as optional Odd-Even Bonus and Poker Bonus side wagers. The player and dealer each receive seven face-down cards.

The player examines their cards to build a hand that consists of all Odd or all Even cards. Odd and Even cards are defined as follows:

- Odd Cards: Three, Five, Seven, Nine, Jack, King
- Even Cards: Two, Four, Six, Eight, Ten, Queen
- Either Odd or Even: Ace

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The player then chooses whether to fold or play. If the player chooses to fold, they forfeit their Ante wager. If the player chooses to play, the other cards from their hand are discarded and an additional Play wager must be placed in an amount equal to the Ante wager. Then, the dealer's cards are revealed. The dealer builds their highest-ranking hand of all Odd or all Even Cards.

The payout of the Ante and Play wagers depend on if the dealer qualifies with a Kinghigh, four-card hand or better. If the dealer does not qualify, then the Ante wager wins 1 to 1 and the Play wager pushes.

If the dealer does qualify, the player's hand and dealer's hand are compared. The comparison is decided based on the greater number of all Odd or all Even cards. If these amounts are equal, the highest cards in both hands are compared, and then the second-highest cards in both hands are compared, and so forth. The game then resolves:

- The Ante and Play wagers both pay 1 to 1 if the player beats the dealer,
- The Ante and Play wagers push if the player and dealer tie,
- The Ante and Play wagers are lost if the dealer beats the player.

The Odd-Even Bonus side wager pays out based on the greater amount of Odd or Even cards in the player's hand, and if the hand includes an Ace or not. There are 6 available paytables; see <u>Table 1</u>. The Odd-Even Bonus side wager will still pay if the player folded.

Hand	Paytable	Paytable	Paytable	Paytable	Paytable	Paytable
Hand	1	2	3	4	5	6
7 Cards no Ace	10 to 1	10 to 1	25 to 1	20 to 1	25 to 1	40 to 1
7 Cards	4 to 1	5 to 1	10 to 1	10 to 1	10 to 1	10 to 1
6 Cards no Ace	3 to 1	3 to 1	5 to 1	4 to 1	5 to 1	5 to 1
6 Cards	2 to 1	2 to 1	1 to 1	2 to 1	3 to 1	2 to 1
5 Cards no Ace	1 to 1	1 to 1	Push	Push		

Table 1. Odd-Even Bonus Paytables

The Poker Bonus side wager pays out based on the poker hand-type of the player's hand, with winning Poker Bonus hands required to be comprised of all Odd or all Even cards. If the player discarded any of their cards, these are also considered as an alternative and would be used if its poker hand type outranks the non-discarded cards. For example, if the player's hand is {Ace, Queen, Queen, Eight} while discarding {Five, Five, Five}, it would count as a Three of a Kind. If the player folded, the Poker Bonus side wager is still evaluated based on the sets of all Odd or all Even cards in the player's discarded hand. The pay depends on the poker hand that is formed. There are 4 available paytables; see <u>Table 2</u>.

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Hand	Paytable 1	Paytable 2	Paytable 3	Paytable 4
Seven Card Flush	2500 to 1	1000 to 1	8000 to 1	500 to 1
Six Card Flush	1000 to 1	250 to 1	1000 to 1	100 to 1
Five Card Flush	50 to 1	40 to 1	40 to 1	40 to 1
Four of a Kind	25 to 1	25 to 1	25 to 1	20 to 1
Full House	10 to 1	10 to 1	10 to 1	10 to 1
Three of a Kind	3 to 1	3 to 1	3 to 1	3 to 1
Two Pair	2 to 1	2 to 1	2 to 1	2 to 1

#### **Table 2. Poker Bonus Paytables**

Additionally, the Poker Bonus side wager can be set-up with a progressive jackpot. The seed value is 10,000 times the cost to place the side wager, and there is a 20% contribution rate from each bet on the side wager. The cost to place the side wager is a fixed amount of either \$1.00 or \$5.00. The paytable for this configuration can be found in <u>Table 3</u>.

**Table 3. Poker Bonus Progressive Paytable** 

Hand	Pay
Seven Card Flush	100% of Jackpot
Six Card Flush	10% of Jackpot
Five Card Flush	500 for 1

This game can be played with multiple players at the same table playing against the dealer. If multiple players win 100% of the jackpot during the same round, the jackpot will be split evenly.

Once all wagers are resolved, all cards are collected and shuffled back into the deck for the next round.

#### **Mathematical Analysis**

The analysis for *Ace Odd Even* was performed using a program that iterated over all the possible player and dealer hands. The hands were compared and the optimal choice of when to fold or play was determined. The optimal strategy is for the player to fold if and only if their hand is 4 cards without any Aces. This results in the return summary found in <u>Table 4</u>. Note that RTP represents the Return to Player, which is the ratio of Average Win to Average Wager. RTH represents the Return to House, also known as the Element of Risk, and is the expected house earnings scaled relative to the Average Wager. The HE is the traditional House Edge measurement, scaled relative to the Initial Wager.

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Table 4. Ace Odd Even – Return Summary			
Avg Wager	RTP	RTH	HE
1.6785	98.09%	1.91%	3.21%

The analysis for the Odd-Even Bonus side wager was performed using a program that iterated over all 7-card hands. The probabilities were obtained from the results and

combined with the pays in <u>Table 1</u> to calculate the RTP and HE. See <u>Table 5</u> and <u>Table 6</u>.

Table 5. O	dd-Even	Bonus –	Probabilities

Hand	Probability
7 Cards no Ace	0.00517405
7 Cards	0.01252665
6 Cards no Ace	0.04829113
6 Cards	0.08687783
5 Cards no Ace	0.17537306

Table 6. Odd-Even Bonus – Return Summary

Metric	Paytable 1	Paytable 2	Paytable 3	Paytable 4	Paytable 5	Paytable 6
RTP	92.41%	93.66%	91.12%	92.39%	90.96%	90.03%
HE	7.59%	6.34%	8.88%	7.61%	9.04%	9.97%

The analysis for the Poker Bonus side wager was performed using a program that iterated over all possible 7-card hands. Note that this side wager has a strategy component since Aces should never be discarded. For example, if the player was dealt {Ace, Ace, Eight, Eight, Nine, Seven, Five}, the Even cards would be {Ace, Ace, Eight, Eight} and the Odd cards would be {Ace, Ace, Nine, Seven, Five}. The optimal strategy would be to discard the pair of Eights for the main wager since there is a greater amount of Odd cards. However, the Poker Bonus' optimal strategy would be to discard {Nine, Seven, Five} so that the Two Pair can be retained. The probabilities collected in Table 7 are assuming the player is playing to optimize the side wager without regard to the main wager.

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#### Table 7. Poker Bonus – Probabilities

Hand	Probability
Seven Card Flush	0.0000006
Six Card Flush	0.00001884
Five Card Flush	0.00124319
Four of a Kind	0.00168067
Full House	0.01421151
Three of a Kind	0.06098480
Two Pair	0.13770378
Full House Three of a Kind	0.01421151 0.06098480

For the non-progressive paytables, these were combined with the pays from <u>Table 2</u> to calculate the RTP and HE in <u>Table 8</u>.

Table 8. Poker Bonus – Return Summary

Metric	Paytable 1	Paytable 2	Paytable 3	Paytable 4
RTP	93.95%	91.28%	92.74%	90.16%
HE	6.05%	8.72%	7.26%	9.84%

The probabilities for the flushes from <u>Table 7</u> were also used to analyze the Poker Bonus side wager when configured with the progressive paytable. This was found to have an RTP of 82.22% and HE of 17.78%.

All analysis was performed assuming a freshly shuffled shoe.

Summary			

The maximum RTP for *Ace Odd Even* is 98.09% from placing the main wager without any side wagers. The minimum RTP of 82.22% occurs from the Poker Bonus side wager when it is configured with the progressive paytable.

#### **Concerns Identified:**

The following concerns were raised during the evaluation of the aforementioned game. The details are as follows:

NONE

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#### Conclusion

Gaming Laboratories International, LLC attests that it has reviewed the mathematics of the game as submitted by Robert J. Schotzinger and has performed an independent review of the game play to confirm that the submission documents are accurate.

Please visit Gaminglabs.com to view the applicable Terms and Conditions and GLI Product Certification Scheme.

It is declared and affirmed under penalty of perjury that to the best of GLI's knowledge and belief, the GLI certification process was conducted in accordance with Nevada Gaming Control Board's (NGCB) requirements and that the product being certified in this Report meets the requirements of the Nevada Gaming Control Act and all regulations, technical standards, control standards and procedures, policies, and industry notices implemented or issued by the NGCB.

Should you have any questions or need any additional information, please feel free to contact our office.

#### Sincerely, GAMING LABORATORIES INTERNATIONAL, LLC

Christine M. Gallo Senior Vice President, Quality and Technical Compliance

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# **APPENDIX I**

#### Nevada Test Cases Evaluated and Test Results:

Test Cases Relating to Return Percentage:

Test Case	Version	Test Results
14.040.1 (a)	2.0	Pass ①

1 Please note that the test case listed above is related to Gaming Devices and may factor into determination of suitability for Nevada.

**Contact Us** 





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