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Registration

This is the shareware version of **Sage Video Poker Simulator**. Please register this program if you decide to keep it. Upon registering you will be sent **Sage Video Poker Simulator**, the registered version, or the more advanced **Sage Video Poker**. Please fill out the Registration form and send this form along with payment to:

Sage Software
PO Box 7223
Huntsville, AL 35807

Credit card orders are also accepted (please see the Registration form).

If your computer is equipped with a printer, you can print the registration form by selecting that help topic (position the mouse over Registration form and click the left button), then select the **Print Topic** entry under the **File** menu item. This registration form can also be found in the file ORDERFM.DOC.

A list and a brief description of the Video Poker programs that Sage Software provides follows:

Sage Video Poker Simulator (unregistered). This is the shareware version which can simulate a Draw Poker game only (no wild cards). It has realistic sound effects, great graphics, and user definable payout tables. Statistics of the different types of hands the player has gotten during play are kept.

Sage Video Poker Simulator. This program is given to the user when he registers the unregistered version. The registration reminder screens have been removed. This program can simulate Draw Poker, Jokers Wild, and Deuces Wild machines. Also, all settings and statistics can be saved to disk and loaded at a later time.

Sage Video Poker. This is a more advanced version of the Simulator. It can do everything that the Simulator can do plus has functionality which can analyze the poker hands to find which are the best cards to discard for any poker hand. This analyzing functionality includes Advice, Tutor, Analyze Hands, and Analyze Game.The Advice button can be selected anytime during a game after the initial cards are dealt. This will tell you which the best cards to discard are for the current hand and what the expected winnings will be. It will also show the expected winnings for every possible discard combination. When the Tutor is turned on, it will notify you whenever you do not choose the proper cards to hold to yeild maximum returns during a game. The Tutor will also keep a list of all the mistakes you made and will show you the percent advantage that you lost due to your errors. The Analyze Hands functionality displays the same information as the Advice button does but you can specify any poker hand to be analyzed. The Analyze Game functionality will analyze the current game you have specified. After analyzing a game, you will be shown what the player's expected return is upon perfect play. Also you will be shown what percent of the time you can expect to get each of the payout hands upon perfect play. Another feature that will prove a very usefull tool to use if you want to learn how to play a particular Draw Poker game is the Create Playing Strategy functionality which can automatically create a playing strategy for the specified game. As a bonus, there is a Tournament Play mode in this program. This is a fast-paced exciting break from standard play mode. The object is to score as many points as you can in a 10 minute period. If you are good enough to score in the top 10, you get to place your name on the top 10 list (sorry, you don't get a prize!). This program is for someone who wants to go beyond just playing the game. It allows you to find which video poker machines in a casino offers the best returns and it can help you learn the correct cards to hold in order to maximize your winnings.

Sage Software also has a number of other entertaining programs.

If you have additional questions about these programs or about registering, please call Sage Software at (205) 830-9364   9:00am - 5:00pm CST Monday - Friday. You can also E-mail us at: **102225.2363@compuserve.com**

You are welcome to visit our WEB site at: **http://www.best.com/~mcintyre/sage/**

Registration Form

___ I would like to register my version of **Sage Video Poker Simulator**. (You will be sent the registered version upon receipt of the registration fee). Software cost = $10.00. Shipping and Handling = $1.00 ($2.00 if not in the U.S. or Canada).

___ I would like to register, but send me **Sage Video Poker** in place of the Simulator. Software cost = $25.00. Shipping and Handling = $1.00 ($2.00 if not in the U.S. or Canada).

___ In addition to the registered program selected above, send me **Sage Blackjack Simulator**. Software cost = $5.00 (Normally $10.00).

___ In addition to the registered program selected above, send me **Sage Blackjack**. Software cost = $27.00 (Normally $35.00)

Disk type: ___ 5.25   ___3.5

Software Total $_____
Shipping & Handling $_____
Total $_____

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Please print your name and address clearly to avoid delays.

Your Name: _____

Address: _____

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Shareware Survey: How did this product come to your attention?
___1. From a shareware vendor (name)   _____
___2. From our WEB page.
___3. From a BBS (name)   _____
___4. From a friend.
___5. Other (please specify)   _____

Enhancements and Improvements over last version

This is the second major release of **Sage Video Poker** (version 2.0). The following is a list of all the enhancements made since the last major release (version 1.0). These enhancements were made to the full version of Sage Video Poker, not all of which are in the shareware version due to its limited functionality.

New Functionality

Create Playing Strategy. This feature allows you to automatically create a set of playing rules that when followed will allow you to play the specified game perfectly, or close to it. This functionality is only enabled for Draw Poker games (no wild-cards).

Preset Games. This feature allows you to select from 18 preset games.

Enhancements

Added the ability to specify three different payouts for Four of a Kinds in the payout table. This allows you to specify the Bonus video poker games such as Aces and Faces that are so popular in the casinos.

Advice button now works for all game types including Deuces Wild.

Evaluate Hands functionality now works for all game types including Deuces Wild.

Evaluate Game functionality now works for all game types including Deuces Wild.

Tutor now works for all game types including Deuces Wild.

Why Video Poker

Why choose video poker over standard slot machines? With video poker you are involved in a decision making process whereas the slot machines offer only a mind-numbing repetitive button pushing or arm pulling process (okay, their not that bad - especially when you win!). Also, video poker machines generally offer more favorable advantages to the players who can make the correct playing decisions. Some of these machines actually offer long term positive returns when played correctly!

Rules of the game

The video poker machine is based on the **Five Card Draw** poker game. The object of the game is to get a <u>hand</u> that offers the highest payout possible. Different hand types offer different payouts. These payouts are loosely based on the <u>probability of getting the hand</u>. Generally, the rarer the hand is, the higher its payout will be. The payout table which shows the payout for each type of hand is displayed at the top of the video poker screen.

To begin each round of play the player must make a bet. This bet is taken from the number of credits allocated to the player. After the bet is made, five cards are dealt to the player and are shown on the screen. The player then has the option of holding or discarding as many of these cards as he wants. The cards that he discards are then replaced with new cards from the deck. This new hand represents the player`s final hand. If the hand is good enough to be one of the payout hands, the number of credits allocated to the player will immediately be incremented by the amount specified in the payout table. At this time the machine is waiting for the player to place his next bet to start the process over.

Hand Types

Here is a list of the different types of poker hands ordered from highest to lowest:

Royal Flush - A, K, Q, J, 10 all of the same suit.
Straight Flush - Any five card sequence in the same suit. (Ex: 8, 9, 10, J, Q and A, 2, 3, 4, 5 of same suit).
Four of a Kind - All four cards of the same index (Ex: K, K, K, K).
Full House - Three of a kind combined with a pair (Ex: A, A, A, 5, 5).
Flush - Any five cards of the same suit, but not in sequence.
Straight - Five cards in sequence, but not in the same suit.
Three of a Kind - Three cards of the same index.
Two Pair - Two separate pairs (Ex: 4, 4, Q, Q).
Pair - Two cards of the same index.

Types of Video Poker Games

There are three different types of video poker machines.

Basic Draw Poker
This game is dealt from a standard 52 card deck. There are no wild cards. The minimum type of hand that gives a payout is usually a pair of Jacks, however occasionally a pair of 10s or a pair of Kings are the minimum payout hand. The payout table for this type of game is usually as follows:

Hand	Payout
Royal Flush	250, 500, 800, 1000 or more coins for one
Straight Flush	50 or 100 coins for one
Four of a Kind	25, 40, or 80 coins for one
Full House	6, 7, 8, or 9 coins for one
Flush	5 or 6 coins for one
Straight	4 coins for one
Three of a Kind	3 coins for one
Two Pair	2 coins for one
Pair (Jacks or higher)	1 coin for one

Joker`s Wild
This game is dealt from a standard 52 card deck with the addition of one joker. The joker is a wild card and will assume the index and suit of the card that will yield the highest payout for the hand. Since the addition of this wild card increases the chances of getting a good hand, the payout table for this type of game is not as generous as the one for the Basic Draw Poker game to offset this advantage. The minimum type of hand that gives a payout is usually either any hand with a joker or two pairs. The payout table for this type of game is usually as follows:

Hand	Payout
Royal Flush	250, 500, 800, 1000 or more coins for one
Wild Royal Flush	50 or 100 coins for one
Five of a Kind	100 or 200 coins for one
Straight Flush	40 or 50 coins for one
Four of a Kind	15 or 20 coins for one
Full House	7 or 8 coins for one
Flush	5, 6, or 7 coins for one
Straight	3, 4, or 5 coins for one
Three of a Kind	2 coins for one
Two Pair	1 coin for one
Joker with Anything	1 coin for one

Deuces Wild
This game is dealt from a standard 52 card deck where the deuces (2s) are counted as wild cards. Since the addition of four wild cards greatly increases the chances of getting a good hand, the payout table for this type of game is not nearly as generous as the Basic Draw Poker or even the Joker`s Wild game. The minimum type of hand that gives a payout is usually three of a kind. Also, a large payout is usually given if the player happens to get all four wild cards in a hand. The payout table for this type of game is usually as follows:

Hand	Payout
Royal Flush	250, 500, 800, 1000 or more coins for one
Four Deuces	200 coins for one
Wild Royal Flush	20 or 25 coins for one
Five of a Kind	10 or 15 coins for one

Straight Flush	8 or 9 coins for one
Four of a Kind	4 or 5 coins for one
Full House	3 coins for one
Flush	2 or 3 coins for one
Straight	2 coins for one
Three of a Kind	1 coin for one

In addition to these different types of games there are two different types of payouts: the Full-Payout or Flat-Top machine, and the Progressive machine. The Full-Payout machines will pay you a fixed amount of coins if you hit the Royal Flush. The Progressive machines will pay out a jackpot if you hit the Royal Flush when you have the maximum bet out. This jackpot continues to grow until the Royal Flush is hit and normally grows at a rate of 1% or 2% of the total amount bet by the players. Once hit, the jackpot will drop to a preset level and start growing again until it is won again.

How to Play

Before starting to play you should set the game that you want to play. By default the game set is a Draw Poker game with a fairly standard payout table. If you want to change the default game in any way, select the **Game Definition** option under the **Game** menu item. This will display the <u>Game Definition dialog box</u> where all parameters controlling the game can be changed.

Once all the game parameters are set you are ready to make your first bet to start the game. If you want to make the maximum bet, select the **BET MAX** button. If you want to make a smaller bet, select the **BET ONE** button once for each credit that you want to bet. When the bet is placed, the column representing the payouts for the selected bet on the payout table will highlight in red and the number of credits allocated to you will be decremented by the size bet placed.

If you have made the maximum bet (5 credits) you will automatically be dealt the first five cards. If not, select the **DEAL/DRAW** button.

After the initial five cards are dealt, you must determine which cards you want to hold and which cards you want to discard. To hold a card, select the **HOLD/CANCEL** button under it. The word HOLD should appear directly above the card. If you change your mind and decide to discard the card, select the **HOLD/CANCEL** button again and the word HOLD should disappear. If you are dealt a good hand and want to hold all the cards, you must select the **HOLD/CANCEL** button for each of the five cards.

Once you have selected the cards that you want to hold, select the **DEAL/DRAW** button. This will cause the cards that weren`t held to be replaced with new cards from the deck. Even if all cards are held, the **DEAL/DRAW** button needs to be selected in order for your final hand to be analyzed and paid off if necessary.

After the last cards have been dealt, the computer analyzes the final hand to find out what, if any, payout it has earned. If it has in fact earned a payout, the type of hand along with its payout are displayed on the screen and your credits are incremented by the appropriate amount. At this time the round is over and the computer awaits your next bet to repeat the process.

Hand Probabilities

This is the probability table for getting each of the different types of poker hands on a **Draw Poker** machine. This table represent the probability of being dealt the hands - not after drawing additional cards.

Hand Type	Probability	% Probability
Royal Flush	4 Out Of 2598960	0.0002%
Straight Flush	36 Out Of 2598960	0.0014%
Four of a Kind	624 Out Of 2598960	0.0240%
Full House	3744 Out Of 2598960	0.1441%
Flush	5108 Out Of 2598960	0.1965%
Straight	10200 Out Of 2598960	0.3925%
Three of a Kind	54912 Out Of 2598960	2.1128%
Two Pair	123552 Out Of 2598960	4.7539%
Pair (Jacks and Up)	337920 Out Of 2598960	13.0021%

If specific cards are specified for **Four of a Kind** then the number of possibilities are 48 times the number of cards specified (Ex: **Four of a Kind (A)** - 48; **Four of a Kind (2, 3, 4)** - 144).

The possible pairs for each of the possible pair cards are: **10s and Up** - 422400**; Jacks and Up** - 337920; **Queens and Up** - 253440; **Kings and Up** - 168960; **Aces** - 84480.

Other Programs

Here is a list and a brief description of other programs offered by Sage Software. If you are interested in purchasing any of them, please fill out the Order form and send this form along with payment to:

Sage Software
PO Box 7223
Huntsville, AL 35807

If your computer is equipped with a printer, you can print the order form by selecting that help topic (position the mouse over Order form and click the left button), then select the Print Topic entry under the File menu item.

Or you can call us for credit card orders at: **(205) 830-9364**.

Sage Blackjack Simulator. This is a casino blackjack simulator with outstanding animated graphics, sound effects, and background music. It can simulate the house rules of most casinos in the world. Up to seven players may play at the same time. Any seat can be unplayed, played by the user, or played by the computer according to a playing strategy which the user can define. From 1 to 8 deck games can be specified. Either a face-up or face-down game can be defined. Either a random or a casino shuffle can be defined. The speed of the graphics can be changed by the user to control the speed of the game. Various statistics such as current bankroll, largest bankroll, smallest bankroll, winnings, number of rounds played, and more are kept. With the casino shuffles and because all cards are collected and discarded in the same order as the casinos do, this program is one of the best casino blackjack simulators on the market at any price!

Sage Blackjack. This is the top of the line as far as blackjack programs go. This program was designed to teach the user winning blackjack strategies and can also be used to test and even create them. It has many teaching aids available for doing this. One teaching aid provided by this program is the Tutor. When the tutor is turned on, the computer will monitor each playing action the user makes while he plays and will notify him if he makes a mistake. The user can define any playing strategy to be tutored on, including playing strategies based on a true count. Another teaching aid is the Count Training functionality that can help teach the user how to count cards. Card counting is a method that experienced blackjack players use to gain an advantage over the casinos. It is no secret that a player who counts cards can gain an advantage over the casinos. Yet another training aid provided by this program is the Flash Cards. Any playing strategy that you define for a player can automatically be transferred to flash cards which you can scroll through to help you learn the proper playing actions to take under different situations. To test playing or betting strategies, this program has the ability to define most playing and betting strategies to each of the 7 seats. When the graphics are turned off and the game is started, the computer can deal more than 1,000,000 hands an hour (or closer to 6,000,000 when a 100mhz pentium or better is used). At this high rate, it is possible to evaluate different strategies by assigning them to different seats and comparing the statistics. The player`s advantage for each strategy will converge toward the actual value when a large number of hands are tested. Also this program has the Evaluation functionality that can be used to find the best playing action to take under different conditions. This functionality can be used to calculate the basic strategy for different house rules and can also be used to calculate count based strategies for different counting methods! The decks used in the game can also be modified. The players can be programmed to enter and leave the game under different conditions, such as based on the true count or based on money won or lost or the number of rounds played. This program offers a wealth of statistics including statistics based on the types of hands, the true count, count reversal, progression, sessions, previous hands, and more. The animated graphics, sound effects, and background music makes this a great blackjack program to play for the shear entertainment as well. This program comes packaged with a manual and can be found in a few selected stores.

Barraging Barriers. This is a challenging multi-level maze game. The object is to score as many

points as you can by collecting bonuses as you advance to higher and higher levels, trying not to let the barraging barriers barricade you.

Ditto. The object of this game is to score as many points as you can by repeating the button sequence that is shown to you. There are four different game types to choose from: a 3 button configuration, a 4 button configuration, a 6 button configuration, and a progressive game where you can advance to higher levels. The animated graphics and sound effects makes this an entertaining game to pass the time. A good short-term memory is the only requirement for scoring big on this game.

Sage Concentration. This is a great game for ages 9 to 99. It simulates the card game "Concentration" where all 52 cards of a standard deck are dealt face-down and players alternate taking turns trying to flip two cards over that match. You have the option of playing against another human opponent or you can play against one of four levels against the computer. This program has great sound effects, animated graphics, and 20 different card back designs to choose from.

Order Form

___ I would like to order Sage **Blackjack Simulator** (latest version). Software cost = $10.00. Shipping & Handling = $1.00 ($2.00 outside the U.S. and Canada).

___ I would like to order **Sage Blackjack** (latest version). Software cost = $35.00. Shipping & Handling = $2.00 ($4.00 outside the U.S. and Canada).

___ I would like to order **Barraging Barriers**. Software cost = $5.00. Shipping & Handling = $1.00 ($2.00 outside the U.S. and Canada).

___ I would like to order **Ditto**. Software cost = $5.00. Shipping & Handling = $1.00 ($2.00 outside the U.S. and Canada).

___ I would like to order **Sage Concentration**. Software cost = $10.00. Shipping & Handling = $1.00 ($2.00 outside the U.S. and Canada).

Disk type: ___ 5.25   ___3.5

Software Total $_____
Shipping & Handling $_____
Total $_____

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----

Please print your name and address clearly to avoid delays.

Your Name: _____

Address: _____

                     _____

                     _____

Game Menu Item

The **Game** menu item provides some options for controlling the game.

When you select the **Game Definition** entry, the Game Definition dialog box is displayed. This is were you can define all parameters controlling the game.

When the **Sound On** entry is selected, sound effects will be heard during play.

When the **Reset** entry is selected, the current game session will be reset. The number of credits will reset to 1000 and the Statistics will be cleared.

Selecting the **Exit** entry will terminate the program.

Statistics Menu Item

The **Statistics** menu item allows you to view statistics related to the game.

When the **Statistics** entry is selected, the [Statistics dialog box](#) is displayed. This dialog box shows statistics accumulated while playing in Standard play mode.

Four of a Kind Definition Dialog Box

This dialog box allows you to define specific cards for which you must receive four of in order to receive a specified payout. This dialog box is displayed when the **Definition** button associated with the FOUR OF A KIND hand type is selected on the [Game Definition dialog box](#).

The **Four of a Kind Composed of** radio buttons define the number of cards that are to be specified.

The **Card1**, **Card2**, and **Card3** radio buttons allow you to choose from all 13 card indices. If more than one card is specified, you must not choose duplicate cards.

Game Definition Dialog Box

This dialog box allows the user to define the type of game and the payout table associated with it to be played. It is displayed when the **Game Definition** option under the **Game** menu item is selected.

The **Type of Game** radio buttons define the type of game to be played. In this shareware version the type of game can only be **Draw Poker**.

The **Payout** radio buttons define the type of payout to be given when a Royal Flush is hit with the maximum bet out. If **Flat Top** is selected, the payout will always be the same amount when this occurs. It will be the amount specified in the payout table below. If **Progressive** is selected, the payout will start at the value specified in the payout table below, but will continue to grow at the rate of 2% of the total amount of money the player has bet. For example, if the player is betting the maximum 5 credits every hand, the jackpot will increase 1 credit every 10 hands. Once the jackpot is won, it will fall down to 5 times the amount specified for ROYAL FLUSH in the 1 Coin column in the payout table below.

The **Type of Play** radio buttons define the type of playing mode. **Standard Play** represents a casual play mode where the player bets and plays each hand just as he does with the video poker machines found in the casinos. **Tournament Play** represents a fast-paced mode of play where the player tries to win as much as he can in a 10 minute period. In this shareware version the type of play can only be **Standard Play**.

The **Preset Games** button displays the Preset Games dialog box where there are six different preset games to choose from. Once one of the Preset Games is selected, the payout table below will automatically be set with preset values. Once this is done the player may still make adjustments to the table if he wants.

To change the values in the payout table, simply select the desired field and change it via the keyboard or select the scroll arrows to its immediate right. One thing to note however is if you change a value in the 1 Coin column, the fields in the other columns associated with the same hand type will automatically adjust to the appropriate value based on the equation: **num_coins * value in 1 Coin column**. For example, if you enter 1000 in the 1 Coin column of the ROYAL FLUSH, the 2 Coin column will automatically change to 2 * 1000 = 2000, the 3 Coin column will automatically change to 3 * 1000 = 3000, etc... So if you want some of the columns to deviate from this pattern, you should make changes to the 1 Coin column first and then adjust the other columns to the desired values.

There are certain hand types that you can turn on and off. If the WILD ROYAL FLUSH hand type is turned off by unselecting the check box when the game type is either Joker`s Wild or Deuces Wild, all wild Royal Flushes (a Royal Flush composed of at least one wild card) will be treated like a normal Royal Flush and will payout as specified by it.

There are three different FOUR OF A KINDs in which two can be turned off. This enables you to define bonus payouts for specific Four of a Kinds as many video poker machines have. For instance, there are games that offer large payouts for 4 aces.To simulate this you can turn on the first FOUR OF A KIND and define the ace as the card for which these payouts pertain by selecting the **Definition** button which will display the Four of a Kind Definition dialog box. Then simply specify the desired payouts in the payout fields.

You can also turn off the TWO PAIR and PAIR hand types. This may be desirable when you are defining a Joker`s Wild or Deuces Wild game. Because these wild cards increase the likelihood for getting good hands, many machines offset this advantage by not having payouts for PAIR or even TWO PAIR (These games are unfortunately not available in this shareware version however).

If you choose to have a payout for Pair hands, you can define the lowest valid pair card by selecting the **Definition** button. This will cause the <u>Pair Definition dialog box</u> to display.

When you select the **OK** button, all the changes that you made to the game should immediately show up on the screen (i.e. type of game, payout table, etc...).

Pair Definition Dialog Box

This dialog box allows the user to define the cards that constitute a valid pair card. It is displayed when the **Definition** button associated with the PAIR hand type is selected on the Game Definition dialog box.

The **Pair Composed of** radio buttons define the lowest valid pair card. If, for instance, the **Jacks and higher** radio button is selected, whenever a pair of Jacks, Queens, Kings, or Aces is obtained in a game, you will receive some type of payout. Any other pair of cards will not.

Preset Games Dialog Box

This dialog box allows you to select from 6 different preset games. It is displayed when the **Preset Games** button is selected on the [Game Definition dialog box](#).

The **Type of Game** radio buttons are disabled in this shareware version since the only game that can be played is Draw Poker. To select one of the games choose one from the radio buttons below and then selected the **Ok** button, the Game Definition dialog box will automatically be set with the game that you just selected.

Statistics Dialog Box

This dialog box displays information on the hands a player has played in standard play mode. It is displayed when the **Standard Play Stats** entry under the **Statistics** menu item is selected.

At the top of this dialog box is displayed the total number of hands played. Below this is the winnings encountered after playing these hands. A loss would be represented by a negative number. The return is displayed below this. The return is calculated from **winnings / total amount bet * 100 + 100**.

Selecting the **Clear** button will clear out all the stats. Also, if the user changes the game parameters the stats will automatically clear.

The list below shows the number of each hand type the player had along with the percentage of time that it occurred.