



Help for Craps

Please click on the item of interest

Craps Rules

Casino Craps rules and general Craps tutorial.

Game Play

How to play Craps on your computer.

Game Settings

Items which you can customize for your preferred method of play.

Keyboard Shortcuts

Bets which you can rapidly set with the Keyboard rather than the mouse.



Craps Rules

The following items provide information on the game of Craps as it is played in most modern Casinos. It is designed so a Novice can learn and play the game of Craps without drawing the inevitable snide Dealers' remarks and snickers from the onlookers! If you know how to play Craps, see [Game Play](#) for help on running the program.

[Basic Craps](#)

[Coming Out](#)

[Pass Bets](#)

[Dont Pass](#)

[Come Bets](#)

[Don't Come Bets](#)

[Field Bets](#)

[Odds Bets](#)

[Place Bets](#)

[Buy Bets](#)

[Proposition Bets](#)



Game Play

This section describes the "nuts and bolts" of running the Software. If you wish to learn or brush up on Casino Craps, please see [Craps Rules](#) first.

Please click on the item of interest:

[Game Initialization](#)

[Setting Bets](#)

[Placing Bets](#)

[Placing Odds Bets](#)

[Removing Odds Bets](#)

[Rolling the Dice](#)

[Place Bet Functions](#)

[Buy Bets](#)

Or, Click on a button to discover its function:





Game Settings

This section contains information on some of the more specific features and settings of Craps which may be customized by the player for his or her own personal preference.

Please click on the item of interest:

[Sound](#)

[Setting Maximum House Odds](#)

[Automatic Bets](#)

[Odds Betting Modes](#)

[Statistics](#)

[On/Off Preferences](#)

Brings up this HELP file.

Basic Craps

Why shoot Craps?

Dice is one of the oldest gambling games in existence. Roman soldiers rolled clay dice; their Northern Barbarian brethren tossed goat knuckles. Both no doubt enjoyed cheap buffets following their gambling sessions, where heroic rolls were re-lived over goblets of *vino*.

Craps, in its present form, is probably the most exciting Casino game offered. As a bonus, it offers players some of the best odds of any game. Possibly the only other games of chance which offer similar odds are Baccarat and EXPERTLY played Blackjack. Don't fool yourself by concluding you are a Blackjack expert... It requires a thorough knowledge of procedures based on the Dealer's exposed card, while in Craps, gaining reasonable odds requires only the knowledge of which bets to avoid. A disadvantage of Craps (or an advantage, based on your point of view!) is that it is a fast game. Large sums can be won or lost quickly, especially compared to any card game. This can be moderated by your style of play.

OK, how is it done?

Simple! When a game begins and the dice are Coming Out, you are hoping (with a Passline bet) that the shooter will roll either a 7 or an 11. If he succeeds, your Passline bet is doubled and returned to you. If the shooter rolls a 2, 3, or 12, ("Craps"), you lose your Passline bet, and another game begins. Any other roll becomes that shooter's Point, and Passline bets are frozen. The shooter continues to roll. If he succeeds in rolling his Point BEFORE he rolls another 7, all Passline bets are winners, and the dice are once again coming out. If he rolls a 7 before he again rolls his Point, all Passline bets are losers. This is the dreaded "Seven Out".

It can't be that simple!

Watch. Carol approaches the Craps table and notices that the dice are coming out. She places a Passline bet, and rolls the dice. The outcome of the roll is a "5". This is now her point. Carol rolls several more times, and manages to roll another 5 before a 7 appears. Carol wins, as do all players who played the Passline. Notice that the only possible Points are 4, 5, 6, 8, 9, and 10.

Which bets are "good" bets?

The Pass bet with odds and the Come bet with odds (as well as the "don't" bets) are the best bets in Craps. Other bets are offered, and if played in moderation are a lot of fun. Typical Proposition bets (hardways, Craps-Eleven, etc) are losers by a 10% to 15% margin. Passline bets with odds and Come bets with odds, by contrast, favor the house by only 0.8%! In a nutshell... Proposition bets are fun, but do not rely on them for the bulk of your betting. The next time you are playing in a real casino, listen to the barking of the Stick Man as he aggressively peddles the proposition bets. He does this for a reason!

Coming Out

A Craps Hand begins when the dice are "coming out". This means a Point has not been established, and players are actively placing Pass bets, Field bets, Don't Pass bets, and *one roll* Proposition bets. You can tell when the dice are coming out in several ways: The most obvious... Players are placing Pass bets; *the point marker, which has "OUT" on one side and "POINT" on the other, is off of the field of play with the "OUT" side showing*; and the Stick Man is soliciting bets with a "Coming Out!" call.



The point is 5. The dice are NOT coming out!

Normally, players at a game take turns rolling the dice, with each player continuing to roll until a Seven-out is thrown. The dice then pass to the next player in a clockwise direction. When it's your turn to roll, you must have a Pass bet or Don't Pass bet on the board to roll. Make your roll with confidence, and bounce the dice off of the opposite bumpers. Don't knock over stacks of chips or the dealer won't be your friend. If you Roll Short (fail to deflect the dice from a bumper) the Box Man and Pit Boss will stare at you until they are sure you aren't a Blanket Roller.



Pass Bets

The Pass bet is the basic bet in a craps game. You place a Pass bet by setting your chips in the area of the table labeled "Pass". A 2, 3, or 12 (Craps) come out roll will result in the loss of your Pass bet. A 7 or 11 (a "natural") is a winning roll. Any other roll becomes the "Point", and only if a shooter rolls his point again before another 7 will your Pass bet be a winner.

The table minimum is all that is required, but optimum betting (at a Casino offering 2 Times Odds) will usually require a minimum of \$2 to allow the placement of Pass odds. You may place a Pass bet prior to ANY roll of the dice, but it is foolish to do so unless the dice are coming out. Why? For the actual coming out roll, the odds favor YOU, the player, with a passline bet. After the point is established, the House has the edge. It is for this reason that you are allowed to place a Passline bet at any time, but are not allowed to remove a Passline bet once a point has been established.

House Advantage:

0.80% when single odds are taken.



Don't Pass

Craps was originally a game played by individuals, often in seedy "sawdust" bars and in dark alleys against a wall. Without a Bank to provide capital, an individual player acted as a bank and covered bets by supplying cash which was faded by other players. Odds were created on the spot and varied from game to game. A player needed an expert's knowledge of dice odds to avoid getting burned. When Bank Craps (the modern game) began in Casinos, many of the old time players wanted to play the dice as if they, the player, were still the bank, hence the **Don't Pass** bet.

When you bet Don't Pass, you are siding with the bank and against the shooter. The rules to win are the opposite of those for the Pass Bet... if the shooter rolls a 7 or 11 on the Come Out Roll you lose. If the shooter Craps (2, 3 or 12) you win. To deny players a Bank's advantage, one of the craps numbers is *barred* from being effective, usually the 2 or the 12. If this barred number is thrown on the Come Out roll, nothing happens for the Don't player... the bet remains, neither a winner nor a loser.

Don't Pass with Odds

Remember the odds to throw various point numbers? To reiterate:

4 or 10	2-1
5 or 9	3-2
6 or 8	6-5

Since you are now on the side of the House, you must bet, as odds, what the house would normally pay. Here are two examples, at 2X (2 times) odds: Dave plays \$10 on Don't Pass. The shooter rolls a 4. The maximum Dave is allowed to win for an odds bet is \$20 (remember, 2X odds). To get the \$20, he must risk \$40 as an odds bet. If the shooter loses (seven-out), Dave gets even money for his Don't Pass bet, and the odds bet, at 1 to 2, is the previously mentioned \$20. *In all cases, your odds bet will exceed the payoff of the Casino.* Another example: Dave now plays \$5 on Don't Pass. The shooter rolls a 6. To realize a \$10 payoff for his odds, Dave must risk \$12.

Don't Pass bets, or the odds, may be taken down *any time*. It is foolish to do so, however, since once a point has been established, the odds *favor you, the player*. The overall odds for the Don't bettor are, for all practical purposes, identical to the Pass bettor.



Come Bets

The Come bet is another variation of a Pass bet, except the Come bet is placed only after the point is established. Place your Come bet, as a stack of checks (the proper name for "chips"), in the area labeled "Come". If the next roll of the dice is a 7 or 11, your Come bet is an even money winner... 2, 3, or 12, a loser. Note that the rules for winning are the same as the come out roll for the Pass bet. With any other roll, however, your Come bet is physically moved to that number. The next time that number is rolled, your Come bet (at that particular number) is a winner! If the shooter rolls a 7 (seven out), the "numbered" Come bet is lost, and the dice are coming out.

See the example if you are confused.

Like the Pass bet, you cannot remove a Come bet after it has been moved to a number. Note that if you play several Come bets in a row, during a long hand you will gain and maintain positions on the numbers, and it is during these long hands that the big bucks are made.

House Advantage:

0.80% when single odds are taken.

See Odds Bets



An Example of Come betting

Big Jim plays nothing but Come bets. Cruising his favorite dive, he hears a table in an uproar, a hot hand in full swing. Big Jim enters the game, and notices the Point is 4. He places a \$5 Come bet. The shooter rolls an 8. The Dealer moves Big Jim's \$5 bet to the 8 box. The big guy plays another \$5 Come bet, and a 10 is thrown. The new Come Bet is moved to the 10. Jim now has moved Come bets on the 8 and 10, and places yet another \$5 Come bet.

Big Jim now has 3 stacks of chips on the table... \$5 as a basic Come Bet, and \$5 each moved to the 8 and 10.

Jim orders a beer.

The shooter rolls a 3, Craps. The basic Come bet loses. The moved Come bets on the 8 and 10 are unaffected.

Another \$5 is placed as a basic Come bet, and the shooter rolls an 11, "Yo Eleven!". The dealer sets Jim's \$5 win next to his basic Come bet, a total of \$10. Jim takes \$5 and leaves the other \$5 in the Come area.

Jim's beer hasn't arrived yet. Jim hopes the hand continues long enough for the free beer to show up.

The shooter rolls. "Ten Hardway!". The moved Come bet on the 10 is a winner. Now, here is where it can be tricky... the Dealer knows that Jim had a basic Come bet on the table. From a strictly technical standpoint, the dealer would take down Jim's \$5 moved Come bet from the 10, pay it off with another \$5, set the \$10 in front of Jim, and move Jim's basic Come bet to the 10. Being an efficient guy, the Dealer instead sets the \$5 winnings next to Jim's \$5 basic Come bet. The result is *identical*... Jim gets the \$5 he won with the 10 roll, and a moved Come bet still remains at the 10. Jim has two options... he can take just \$5, and leave the other \$5 as a basic Come bet, or he can take the entire \$10. Jim chooses the first option.

Jim still has, on the table, moved Come bets on the 8 and 10, and a \$5 basic Come bet.

The shooter rolls a weak roll, and the other players groan even before the dice stop rolling. "Seven out, line away!". The moved Come bets on the 8 and 10 *lose*. The basic come bet *wins*, and Jim collects the \$10.

The beer never shows.

Jim is a fool for 2 reasons... you should *always* play odds on your moved Come bets, and you should *always* tip the cocktail waitress if you want good service. Jim never tips, and was recognized as a stiff by the disgruntled waitress.



Don't Come Bets

The Don't Come bet plays similarly to the Come bet in that a Don't Come bet is played only AFTER a point is established. You place your Don't Come bet in the area labeled, appropriately, "Don't Come".



If the next roll of the dice is a 7 or an 11, you *lose*, a 2 or 3, you *win*. A 12 is a push or standoff... nothing happens. Any other roll, and the Don't Come bet is moved to the area above the rolled number, where it resides in suspense as the shooter continues to roll. If the shooter rolls a 7 (7-Out), all *numbered* Don't Come bets win. If the shooter rolls the number before a 7-Out, the Don't Come bet at the number loses.

Here is an example, played without odds being taken for clarity.

Linda is a strict Don't Come player. She waits at a table for her moment. A shooter rolls a 5 on the Come Out Roll which is now his Point. Linda plays \$5 on Don't Come. The next roll is a 3. Linda's Don't Come bet is a winner. She again plays \$5. The next roll is a 6. Linda's pile of chips is moved to the 6. Another bet is made, and a 9 is shot. Linda now has Don't Come bets moved to the 6 and the 9, and she has made another basic Don't Come bet as well. The shooter now rolls a 7, for a 7-Out. The basic Don't Come bet (the last bet played) loses. The bets previously moved to the 6 and 9 are both winners at even money.

Playing Odds on your numbered Don't Come bets is *identical* to playing odds for Don't Pass. (See Don't Pass for a description of these sometimes confusing Don't bet odds)

WARNING! A curious tradition in Craps makes it standard for Don't Come Odds bets to work on the Come Out Roll. If you don't want the odds bets to be at risk, tell the dealer your odds are OFF (NOT working).

One final note: It takes nerves of Titanium to be a Don't Come player on a long hand. As your position on the board increases, with each numbered roll you can lose a sizable bet, remembering that odds bets for Don't players are quite large. The windfall, of course, is the secretly hoped for 7-Out, which will provide a huge payoff as all of your Don't Come bets win.

House Advantage:

Overall, a puny 0.60% when 2X odds are taken.



Field Bets

The Field bet is probably the simplest bet at the Craps table. It may be placed at any time between rolls, and the very next roll determines the outcome of the bet. Notice the numbers contained within the "Field" on the table... if any of these numbers are rolled, your bet is doubled and returned to you. The rare 2 and 12 rolls are rewarded with a 2 to 1 payoff. If you are intimidated playing a real Craps game, the Field is a good place to start while observing the flow of the game.

House Advantage:

5.6% when the 2 and 12 are payed 2 to 1.



Odds Bets

Playing odds is probably the most confusing part of Craps for a beginner, but Odds bets in Craps **are the best bet in the Casino**. You may play odds on Pass and Don't Pass bets *after a point is established*, as well as Come and Don't Come bets *which have been moved to a number*.

The Odds bet is nothing more than a bet that the shooter can roll his point before a 7. Everyone knows that 7 is the most probable roll, and as you deviate from 7, the occurrence diminishes. For example, a 5 is a less common roll than a 7. If a shooter's point is a 4, it is only fitting that he should be rewarded if he rolls another scarce 4 before the more common 7. You can realize this reward through the passline odds bet, which is nothing more than a certain pile of chips placed just behind your passline bet.

Payoff - If the point is made, the odds portion of a bet is payed as follows:

For a 4 or 10: 2 to 1
For a 5 or 9: 3 to 2
For a 6 or 8: 6 to 5

A typical House will allow 2X (2 times) odds, which is defined as:

For Pass and Come bets - *The amount wagered cannot exceed 2X your base bet.*
For Don't Pass and Don't Come bets - *the amount payed to you by the House cannot exceed 2X your base bet.*

Here are two examples of odds betting at work.

You bet \$5 on the passline, and the shooter rolls a 4. You may now place a \$10 maximum odds bet.



The shooter rolls his point, and you will receive \$5 for the passline bet, and your odds bet, at 2 to 1, will yield \$30 total (your original \$10, plus \$20, which is the 2 to 1 payoff).



If the shooter loses (rolls a 7 before a 4), you lose your pass bet AND the odds bet as well.

The second example can be trickier... you place a \$3 pass bet, and the point rolled is a 6. Notice that the House pays 6 to 5 on an odds bet when the point is 6 or 8. If you place the legal limit bet of \$6 (remember, 2X odds) the house will not pay you $6/5 \times 6$, which is \$7.20. It will round down to \$7, since they don't want to mess with petty change. To maximize your winnings, make your 6 or 8 passline odds bet a multiple of five as close as possible to the 2X limit. If your pass bet is \$3 and the point is 6 or 8, \$5 is the best odds bet. ($6/5$ of \$5 = \$6, plus your original \$5, = \$11 total returned to you for the odds portion of your bet.) Whew!

Placement of odds for your come bets is done in a similar manner. After the Come bet is moved to a number, determine the amount of your odds bet and place the checks on the table. Ask for "odds on the eight" (or whatever the number). The dealer will move the checks to your bet. Unlike the straight Pass and Come bets, *odds may be removed at any point in a game*. For your Pass odds, simply remove them from the table. For the Come point odds and Don't Come odds, ask the Dealer and he will return them to you. Don't reach for them, or the Craps crew and the Pit Boss will get very excited!

House Advantage: None! The House has no advantage on the odds portion of a Pass or Come Bet.



Place Bets

A Place bet is a bet that a particular number will be rolled before a 7. The chips are placed by the Dealer within the narrow strip that spans the point numbers. The area below the strip is used for moved Come bets... the area above, for moved Don't Come bets.



The Dealer will put your Place Bets here.

Place bets are a simple way to get in on the numbered bet action immediately without having to place several successive Come bets. Place bets may be placed at any time... however, unless you direct otherwise, they are not "working" on the Coming Out Roll roll, and only pay (and are at risk) after a point has been established. Place bets are played ("placed") directly on the number you believe will be rolled before a 7-out. To place a bet, announce "\$6 on the eight", or whatever number you wish to play. If that number is rolled before a seven, you are a winner.

Payoff:

- For a 4 or 10: 9 to 5
- For a 5 or 9: 7 to 5
- For a 6 or 8: 7 to 6

You will not realize these percentages if you play an incorrect number of chips. Like odds bets, the house will not deal in partial payoffs, and will round down to the nearest whole unit. For example, if you bet \$5 on the six and subsequently win, the payoff, at 7 to 6, should be \$5.83. You will receive only \$5 for this bet. To realize proper payoffs, the Place bets on the six and eight should be in multiples of six units. At a \$1 minimum table, this would be \$6, with a payoff of \$7 at the 7 to 6 odds. The other numbers should be placed in multiples of five units.

A popular bet at many tables is \$32 across the board. This is the minimum necessary to realize proper payoffs for winning rolls.

After a place bet wins, you have three options... **Same bet, Press, or Down.** Most casinos will automatically pay you the winnings, which is the "same bet" option, but some will add the winnings to the place bet and thus more than double the bet at that particular number. At these tables, if you do not make your intentions known, the winnings, along with the original bet, will ride. Large amounts of money have been made by persons not keeping track of place bets and subsequently being taken on a long ride.

The three options as they are played in most Casinos...

Same Bet: Whatever your bet was before the roll is retained on the number and the remainder is returned to you.

Press: Your bet is doubled and any leftovers are returned to you. Press seems to have different meanings depending upon where you are playing. If there is any doubt, tell the

dealer exactly what you want done with your bet.

Down: *All* of the bet (winnings and original) is returned to you. Remember, the money ain't yours until you take it down!

Place bets may be taken down at ANY TIME.

One further word... At all tables there are bets labeled "Big Six" and "Big Eight", which pay even money and function similar to a place bet. If the Big Six or Big Eight is thrown before a 7-out, you are a winner. Sounds good? Note that a proper place bet pays 7 to 6, not even money. This makes Big Six and Big Eight two Big Sucker bets. Play your money on a proper 6 or 8 place bet and receive superior 7 to 6 odds, please.

House Advantage:

6 and 8:	1.52%
5 and 9:	4.0%
4 and 10:	6.7%



Buy Bets

A normal Place bet does not pay true odds. To receive true odds, you may *buy* the Place Bet, and so make it a Buy Bet.

Remember the odds payed for Place Bets?

For a 4 or 10: 9 to 5
For a 5 or 9: 7 to 5
For a 6 or 8: 7 to 6

The true odds that these numbers will be rolled before a 7-out are as follows:

For a 4 or 10: 2 to 1
For a 5 or 9: 3 to 2
For a 6 or 8: 6 to 5

By paying a small fee (called a *Vigorish*) to the house, you may receive these superior, true odds for your Place Bets. The Vigorish is computed as 5% of your Place bet, **rounded up** to the nearest whole unit. After you pay the Vigorish, the Dealer will place a small yellow token on the chip pile, labeled with a "B" or the word "Buy", indicating that the bet should be payed at true odds.

Of course, when the smoke clears, you are not receiving true odds at all, since the Vigorish becomes part of the house "take" on the given bet. The Vigorish is not returnable, and if you take the bet down, it will not be returned to you.

About the only time you should Buy a bet is when you Place the 4 or 10 in units of \$20. 5% of \$20 is exactly a buck, and creates a 4 or 10 Place bet with an overall House percentage of 4.76%, compared to 6.7% for a regular Place bet on these numbers.



Proposition Bets

PROPOSITION bets are many and varied, and usually located at the center of the table. They are colorful, sometimes confusing, and when played with small amounts of cash, a lot of fun. They also make lots of money for the Casino.

Proposition bets may be divided into two basic forms... **One Roll Action Bets**, and the popular **Hardways**.

More Craps Trivia: Dealers are *not* allowed to hand you any Chips... they must first be set on the surface of the playing field. Similarly, don't try to hand the Dealer a Place bet, for example. Set it within reach of the dealer, and call out your bet. This technique prevents Dealers from slipping their crooked cohorts across the table a few "extra" chips.



One Roll Action

These bets are just what the name implies... one roll wonders. The bet is played by asking the Stick Man or one of the dealers to place your chips for you. Then, if you have more than a couple of chips to bet, lay the chips on the playing surface in front of the dealer. You may have observed "cool" players flipping chips like little UFO's toward the Proposition playing area while calling their bets in a Humphrey Bogart baritone. Anyone flipping or tossing chips *excessively* (more than one or two chips) is despised by Dealer and Stick Man alike, as their workload is increased by rounding up the little devils and stacking them on the bet.

The bet exists for exactly one roll. If the outcome of the dice is that depicted by your bet, you win the odds posted in the bet playing field... otherwise, goodbye lunch money.

These bets include

Any Craps - 7 to 1 If the outcome is 2, 3, or 12, you win... otherwise, you lose.

Any Seven - 4 to 1 What the bet implies.

Eleven - 15 to 1 Ditto.

Two Aces - 30 to 1 The snakeyes strike!

CE (Craps-Eleven) The small circles on the board with C and E can really be one of three bets. A bet placed in the C is a normal *Any Craps* bet. Placed in the E it becomes an *Eleven* bet. Most players, however, combine the two into a CE bet, which is placed *between* the C and E circles. One half of the amount is at risk as an Any Craps bet, the other half is an Eleven bet. See this [Example](#) for how a payoff in this case works.

Use caution... some Casinos post odds for these bets at, for example, 8 *for* 1 instead of 7 *to* 1 to make the bet seem more attractive. The payoff is identical in both cases. The key to Prop Bets is *moderation*. A buck here or there is OK. Don't rely on these bets as your primary play in Craps or your stay in Nevada will be short. Typical House advantages on all Prop Bets are about 10 to 15 percent.

Greg plays \$5 on the CE. The next roll of the dice is a 3, *Craps*. One half of Greg's bet wins. Any Craps pays 7 to 1, so $\$2.50 \times 7 = \17.50 . The original \$2.50 at risk is also returned, for a payoff of \$20. Of course, the \$2.50 played on the Eleven is lost.



Hardways

The Hardways are one of the most popular bets in Craps, and put the Casino Owner's children through expensive California colleges. Again, a buck or two is OK. Don't go overboard!

The dice rolls 4, 6, 8, and 10 can be thrown two ways: *easy* and *hard*. An easy roll is one in which the individual die do not match. For example, an easy four must be composed of a 3 and a 1. An easy six can be a 5 and a 1, or a 4 and a 2. A hard roll, on the other hand, must have matching dice. Two deuces is a Hard Four, two fives is a Hard ten, etc. If you ever ask for a Hard Five or something similar, cash your chips and go play megabucks slots... you shouldn't be playing dice!

Hardway Bets are played after a Point has been established. The bet is concluded when either the number played is thrown, or a Seven Out occurs.

An example: The point is 8. Joe plays a dollar on HARD EIGHT and a dollar on HARD SIX. The next roll is six *easy*. The hard six bet is a loser, and vanishes with lightning speed as the dealer sweeps your chips into the coffer. The hard eight bet is still alive. The next roll is a pair of fours, or a hard eight! Joe is a winner at 9 to 1 odds. If a Seven had been thrown, both hardway bets would have been losers.

The hardway bets can add flavor to a game and increase the payoff when, as is popular, the player plays a hardways bet which corresponds to the point. Just GO EASY on them!



Game Initialization

The first time the game is started, all optional features are set to a default setting. Primary bets are set at \$5. Automatic features are all turned "off". Dice Animation and Sound are turned "on".

Starting Cash:

The game begins with \$5,000.

Chip Handling:

The chips visible closest to you in your rail accurately represent your remaining cash. The "silvers" represent \$1, the reds or "nickels" are \$5 each, the black with red stripes, 25\$, and the blues are \$100 each. The screen holds exactly \$3542. Any additional chips are held in reserve, off screen, and are added as needed. Change is made automatically as you bet.

Dice Animation:

The Dice roll animation can be canceled by clicking the ANIMATION button on the button pad. When the button is UP (dimmed), animation is turned OFF. When the button is DEPRESSED (lighted), animation is ON.

There are two sets of dice... a large set and a small set. These may be selected by clicking the SETTINGS button on the button pad, and then clicking on the DICE icon from the Settings Window. The smaller dice are more proportional to the rest of the field and the chip piles, but are harder to read. The larger dice are not to scale with the rest of the game, but are more legible. The choice is yours!

Sound:

If desired, the Dealer Calls, sound effects, and background noise may be turned off by clicking the SOUND button to the UP (dimmed) position.

Viewing Right and Left:

Craps was designed to be 800 pixels in width. If you run Windows at a resolution of 800 X 600 (Super VGA) or higher, you will be able to see the entire game. For those users who run Windows in standard VGA (640 X 480), moving the Mouse Pointer to the left or right edge of the playing field will shift your view of the game to the right or left.

A bit of trivia... a Craps game is crewed by 3 to 4 Casino employees, consisting of two dealers who make change and collect bets, a Stick Man who calls the throws, and a usually dour and bored Box Man sits next to the cash box and twiddles his thumbs. The Dealers are not supposed to watch the dice... their job is to watch the bets. Therefore, it is the Stick Man who makes the colorful calls and solicits bets. To avoid mistakes, the call "Eleven" has been changed to "Yo-Eleven" to avoid confusion with the similar sounding "Seven".



Placing Bets

Bets are placed

by clicking with the mouse pointer on the portion of the playing field corresponding to the desired bet. A pile of chips will appear, with a number indicating the amount of the bet. The amount is specified by first setting your bets before placing them. *Additional clicking with the left mouse button will add to the amount.*

To remove a bet

once it has been placed, clicking on the bet *with the right mouse button* will take that bet down if legal to do so. For example, clicking on a Pass bet with the right mouse button *after* a point has been established will have no effect, as will clicking (again, with the right mouse button) on a Come bet which has been moved to a number (a Come Point). Straight Come and Field bets may be taken down with the right mouse button prior to the dice roll. When in doubt, clicking a bet with the RIGHT mouse button will remove from the table as much of the bet as is legal.

The CE bet is a bit unusual. Clicking within the "C" creates an Any Craps bet; within the "E" creates an Eleven bet. To create a typical CE bet (where both are combined), click the area *between* the two circles.

To summarize:

The **LEFT** mouse button is used to place bets, and the **RIGHT** mouse button is used to remove bets. The game will determine the legality of the request according to standard Craps rules.



Rolling the Dice

To roll the dice:

Click the "Roll 'em!" button. You may also press "R" on the keyboard. If you desire Dice roll animation, be sure the Dice rolling button is depressed to the ON position.

More trivia:

Casino dice are machined to .750 inches and held to a tolerance of "half a thou", or .0005 inches! A code is also imprinted on one of the faces to identify legitimate Casino Dice versus introduced fakes.



Placing Odds Bets

There are 3 ways to play odds bets in Craps: MANUAL, MAXIMUM ON CLICK, and FULLY AUTOMATIC. Don't let the terms throw you... the latter two are primarily for advanced players who wish to speed game play. If you are a beginner, stick with the default setting of MANUAL., which is described below.

To place Odds on a Pass bet:

Click on the playing field *behind the line* after the point has been established. Clicking anywhere *inside* the pass line will increase your basic Pass Bet. Clicking *behind the line* will place or modify your Odds Bet.

To place Odds on a Don't Pass bet:

Click on the bet with the left mouse button *after* the point has been established. Clicking on the bet *prior* to a point being established results in additional cash being bet as a basic Don't Pass bet.

To place Odds on a moved Come Bet, or Don't Come Bet:

Click on the chips after they have been moved to the number with the left mouse button.

The other odds playing modes (as well as additional information on MANUAL) are described in the [Odds Betting Mode](#) section. For further study of the mysterious odds bet in Casino Craps, please see [Odds Bets](#).



Removing Odds Bets

To remove odds from a Come bet or the Pass Line:

Click on the bet with the **RIGHT** mouse button. The odds will be removed and returned to your chip stash. You may bet odds again later if you wish. Since a Pass bet or moved Come bet cannot be taken down, further clicking with the right mouse button does nothing.

To remove odds from the Don't bets:

Click on the bet **ONCE** with the **RIGHT** mouse button. **Use caution...** it is legal to take a Don't Pass or Don't Come bet down AT ANY TIME. This game supports this rule. Any further clicking with the right mouse button will take the basic bet down as well. Once this has been done, you will not be allowed to replay the bet.



Setting Bets

To set the level of your Bets:

Select the **Set Bets button**. An interactive window will appear which will allow you to set your desired bet amount for all of the bets supported in the game. Bets may range from \$1 to a default Table Limit of \$5000. Enter text directly in the fields next to the desired bet.

To quickly change the size of your bets:

All of the bets have "modifier" buttons which quickly change the size of all of the corresponding bets. For the Main Bets, these buttons consist of **/2** (divide by 2), **X2** (multiply by 2), and **Reset** (sets whatever is on the button). When the dice turn hot or cold, you may increase or reduce your bets immediately and easily.



The Place bets have the basic X2 and /2 buttons, and a **32 Across the Board button**. By selecting "32 across the board" and then clicking "X2", you can rapidly increase the level of these bets and still retain favorable payoffs. See [Place bets](#) for a detailed explanation of these often confusing multiples.



Place Bet Functions

To make a Place Bet:

Click on the narrow band above the desired number. A pile of *white* chips will represent your place bet. Don't confuse this bet with a moved Come bet, which is red. The amount of the bet is set with the [Set Bets window](#).



Click here to make a Place bet.

Options after a Place Bet has won:

When one of your Place bets wins the winnings are payed to you, and the original bet remains on the number. The dealer will announce "Same bet, press, or down?" . Additionally, the place bet "control panel" will announce "Place Win", and the three option buttons will become enabled.



Click a button to see its function.

If nothing is done prior to the next roll, the bet will remain the same as on the previous roll. This is the same as the "Same Bet" option. You can "Press" the Place bet, which will double the bet at that number. Or, you may take the bet down by clicking the DOWN button, or simply clicking on the bet with the *right* mouse button.

For a detailed description of "Same bet, press, or down" options, see [Place bets](#).

To take a Place Bet down:

Place bets can be taken down *any time* with a click of the **RIGHT** mouse button on the desired Place bet.



Making a Buy Bet

To make a Buy bet, you must first make a standard Place bet by clicking with the left mouse button on the number of your choice within the Place bet strip. A pile of White chips will appear. Now, *depress and hold* the SHIFT button, and click on the chips, again with the left mouse button. The vigorish for the bet (See [Buy Bets](#)) is deducted from your bankroll, and the yellow Buy button will be placed on the chip stack.

Remember, the Vigorish on a Buy bet is 5%, and will be **rounded up** to the nearest whole unit. It is not refundable, and will be retained by the House if the bet is taken down with the right mouse button.

If the bet wins, the winnings are payed at true odds, and the original bet remains on the board.

When you add to a Buy Bet:

Additional clicking (with the *left* mouse button) on a buy bet will add to the bet in the normal amount. Craps will attempt to keep the bet as a Buy Bet by extracting the correct vigorish, or fee. For example, you create a \$20 Buy bet on the 4 using the above procedure. The bet will cost you \$21. After a roll or two, you are confident the 4 will hit, and want to add to the buy bet. Clicking on the buy bet with the *left* mouse button will create a \$40 buy bet, at a total cost of \$42. This assumes that your [Set Bets](#) window has, for the Place bets, \$20 on the 4.

Big time note:

If you always buy a place bet, be sure your Set Bets window has correct numbers for the Place bets. You will want each number you wish to buy set so that the extracted vigorish maximizes the buy. For example, if you have only \$5 in your Set Bets window for the 4, each time you click on the 4 to create a Place bet, it will cost you \$6, as Craps cannot tell you are going to click 4 times for a standard \$20 buy bet, and extracts a buck for each click. \$20 in each Place bet box in the Set Bets window will optimize your betting if you Buy them.

When you Press a Buy bet:

Craps will try to keep the bet as a buy bet and will deduct the correct vigorish from your bankroll. If you do not have enough cash, the Press command will be denied.

To change a buy bet to a standard Place bet:

You must first take the bet down with the *right* mouse button, and replay the bet in the standard Place bet method. The vigorish is *not* refunded.



Automatic Bets

The built-in Automatic Betting features of Craps reduces the tedium of setting large numbers of bets. For example, if you are always a Passline bettor, selecting AUTO PASS BET will automatically play your Pass Bet for you when the dice are coming out.

To Turn On an Automatic Bet:

Select **SET BETS** from the button pad, then select the desired bet. The button will remain depressed, indicating this Automatic Bet is ON. Craps will now play these bets for you at the optimum moment during Game Play.

To Turn On Automatic Odds:

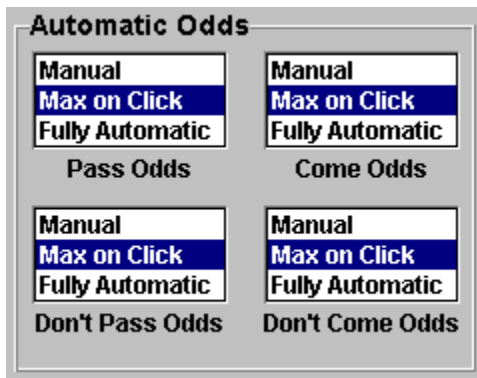
Select **SET BETS** from the button pad. The Set Bets window will appear. You may now select an Odds Betting Mode.



Odds Betting Modes

Setting your Odds Mode:

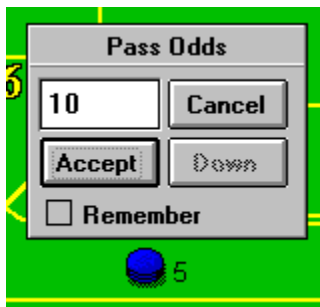
When the Set Bets window is displayed, you can choose from 3 different methods for playing odds on those bets which accept them. The choices include MANUAL (default), MAXIMUM ON CLICK, and FULLY AUTOMATIC.



From the SET BETS Window

MANUAL:

To play an odds bet with Manual selected, click on the bet (or behind the Pass line in the case of the Pass bet) with the left mouse button. A small window will be displayed with a suggested bet in the text box, which will be maximum odds. If you like the suggested odds bet, click ACCEPT. Otherwise, change the bet and then ACCEPT or simply CANCEL.



If you check the REMEMBER Box, the Game will remember your last entered Odds bet, and will display it the next time you request Odds.

MAXIMUM ON CLICK:

A useful setting, Max on Click allows you to place your odds bet with a single click of the left mouse button on the bet you wish to place odds. This will place for you the maximum odds bet, cash permitting. If a less-than-maximum odds bet exits, it will be increased to the legal maximum. If you desire to play less than maximum odds, you must utilize the MANUAL setting for your odds betting.

FULLY AUTOMATIC:

Full Auto will place for you a maximum odds bet the moment it is legal to do so. FULLY

AUTOMATIC can win (and lose) big bucks very quickly if you are a heavy Come or Don't Come player.

Remember, the right mouse button will remove any odds bet played previously.

See [Placing Odds Bets](#).



Statistics

Statistical information is available by selecting the **SETTINGS** button. When the Settings window appears, click the STATISTICS button. The Statistics window will open and display for you information from all preceding rolls, which includes the number of rolls, the number of concluded hands, hands won, hands lost, and the "long hand".

The statistics window may be displayed concurrently with the game field, and will update real time.

Number of Rolls:

This is the number of rolls thrown since either the game began or a request was made to *reset statistics*.

Number of Hands:

The number of hands is an indication of the number of those hands where a point has been established, and excludes coming out rolls which result in a natural (7 or 11) or craps (2, 3, or 12).

Hands Won/Lost:

A losing hand is one which concludes with a 7-out. A winning hand is one in which the point is thrown.

Long Hand:

Often tracked in some Casinos (Reno especially), the Long Hand is the number of rolls a shooter throws before the inevitable seven-out. The longer the hand, the larger the potential profit for Come and Place bettors. Over a dice run of several thousand, the long hand will probably be in the neighborhood of 30 to 40 rolls.

Roll Distribution Graph:

The **bar graph** is a representation of the relative number of occurrences of each number thrown. As more and more rolls accumulate, the graph will assume a mathematically inevitable bell-shaped curve. Over a shorter run (typically less than 2 or 3 hundred) the curve will vary. Greater occurrences of the numbers 2, 3, 4, 9, 10, 11, and 12 will tip the field yield in the player's favor. A greater than normal occurrence of the number 7 usually will favor the house. Anytime fewer than expected 7's are thrown, the player should be winning if appropriate bets are made.

To reset statistical information:

Click the RESET button on the Statistics Window. The actual resetting will occur only at the conclusion of the hand, i.e. if a point is currently established, clicking RESET will have no apparent effect until the dice are once again coming out.

There seems to be two popular definitions of a *hand*. The first is when a shooter establishes a point and then rolls to conclusion... either a winner (his point is rolled) or a loser ("seven out, line away...") The second definition, supported in this game, is the number of rolls a shooter throws before relinquishing the dice, which happens only after a Seven-Out.

(a side note: these published values were used to debug the program, insuring accurate payoff and a dice throw as random as a computer can generate).

The dice are COMING OUT when a shooter has either thrown his point or has thrown a seven. The point marker puck will be off the field of play with the OUT side displayed.

A *Blanket Roller* is a dice sharpie who can control his throws to produce a desired result. It requires years of practice or Psychic powers of control.

The POINT is the roll a shooter has thrown and must roll again to win a passline bet. The only possible points are 4, 5, 6, 8, 9, and 10.

The PASS BET is the most basic (and one of the best) bets to make in Craps. It is normally played when the dice are coming out by placing your bet within the Passline on the playing field.

The Stick Man handles the dice with a long, curved cane and controls the flow of the game. A good Stick Man adds to the flavor of Craps with colorful calls. He'll also rap your knuckles if they stray into a forbidden portion of the playing field (just kidding!)

Pass Odds are played when a point has been established, and are really a side bet to your Pass bet. You are betting, with a Pass Odds bet, on the ability of the shooter to roll his point. Payoff multiples change with the Point... a rare 4 or 10 is much harder to roll than the dreaded 7, and pay accordingly. An EXCELLENT bet mathematically.

The Pit Boss is the bored fellow or lady who oversees a section of Games, and gets excited only at the sight of an Arab Sheik or Donald Trump.

The Box Man usually sits next to the Stick Man, and gets the enviable privilege of stuffing our hard earned cash into the vacuum of the Cash Box, where it is probably sucked directly into the pockets of the Casino owners.

To *Fade* is to match some of the controlling player's money with your own; this becomes the bet between the controller and the fader. Often, a game begins with a player dropping a large sheaf of cash which can be faded by any number of players until there are no more bettors or the cash pile is completely gone.

Lotsa sauce, few shrimp.

Is there such a thing?

Better than No Scotch!

A *Base Bet* is a Pass, Come, Don't Pass, or Don't Come bet without any odds.

To *Work* is to be at risk on a given roll. Some bets, such as the odds on a Come Bet, or Place Bets, are not at risk (They don't *Work*) on the Come Out roll. Casinos will allow a player to declare a bet "Working", usually at the players hunch or discretion.

Same Bet: Whatever your bet was before the roll is retained on the number and the remainder is returned to you.

Press: Your bet is doubled and any leftovers are returned to you. Press seems to have different meanings depending upon where you are playing. If there is any doubt, tell the dealer exactly what you want done with your bet.

Down: *All* of the bet (winnings and original) is returned to you. Remember, the money isn't yours until you take it down!



Sound

Craps uses Sound files known as WAVE files, which allows digital recording of sounds for later playback.

To Hear the Sounds in Craps:

You must have a sound card capable of playing WAVE (.WAV) files recorded and played at 22Khz, 8 bit, Mono Sound. This is a fairly standard format and most sound cards can easily accomodate them. See your Sound Card documentation if in doubt.

To turn Sound ON or OFF:

Click the **SOUND** button on the button pad to the depressed or ON position. Like the DICE ANIMATION button, this button is a two position "switch", with *depressed* = "on".

If the SOUND button is dimmed and DISABLED, and clicking does nothing:

This indicates Craps could not detect WAVE Playing capability on your computer, or critical Sound files were missing. Attempt re-installation of the game.



Dice Animation

Craps produces the best dice roll animation seen in a Windows game. To accomplish this, the file CRAPS.DDS is included and installed in the same directory as the other game files. CRAPS.DDS contains a database of rolls and is accessed continually during game play. CRAPS.DDS must reside in the same directory as CRAPS.EXE. If it is not available, Dice Roll Animation cannot be done.

To turn dice roll animation ON or OFF:

Click the **DICE ANIMATION** button on the button pad (the button with the picture of the rolling dice) to the *down* position. When turned OFF, the dice appear in the middle of the screen and stay there.

There are two sets of dice in Craps... a small set and a larger set about twice the size of the smaller die. The small set looks better and is more to scale with the rest of the game, but the pips can be hard to read on some monitors. The large die are too big relative to the board and chips but are easier to read. Your choice!

Table Limit - The maximum bet that may be played. At most Casinos this does NOT include any subsequent odds bet, although it is wise to first ask.

This controls the delay between dice rolling animation frames. A smaller number creates faster animation. On all but the slowest machines, a 0 creates impossibly fast dice rolling. This delay number is modified when you SET ANIMATION SPEED from the SETTINGS window.

The *Sound Effects Interval* is the number of seconds between what are called "Snippets" of sound... background Sound bites such as coins falling, chips rattling, spectators commenting, and Stick Man encouragements. These are essential to making Sound as realistic as it is. Individual tastes vary... If you want a quieter Casino, set a longer (up to 60 seconds) interval.

Four different mouse pointers, or *mouse cursors*, are available. The Pointers are numbered from 0 to 3. The default is number two. You may change the default to any of the others by entering the number on this line.



This is the button on the Set Bets Window which will set all of your MAIN bets to whatever the button reads. If you like to start your Craps session with all of the main bets set to \$50, edit the entry to read **Set Bet Button=50**. Then, when this button is clicked, all of your main bets will be set instantly to \$50.



Keyboard Shortcuts

While requiring a mouse to play, Craps does have a few Shortcut Keys which may speed the action a bit.

[R] - Rolls the dice.

[S] - Turns Game Sound ON or OFF.

[B] - Displays the Set Bets Window, which allows you to set the desired level of all your bets, as well as some other features.

[T] - Displays Statistics Information on the rolls previously thrown.

[P] - Makes a Pass Bet.

[O] - Makes Pass Odds bet.

[C] - Makes a Come Bet.

[F] - Makes a Field Bet.



Quick Reference Guide

Keyboard shortcuts:

[R] - Rolls the dice.

[S] - Turns Game Sound ON or OFF.

[B] - Displays the Set Bets Window.

[T] - Displays Statistics Window.

[P] - Makes a Pass Bet.

[O] - Makes Pass Odds bet.

[C] - Makes a Come Bet.

[F] - Makes a Field Bet.

Betting:

Setting the Size of Your Bets

Placing a Bet

Taking a Bet Down

Making an Odds Bet

Payoffs:

Odds Payoffs

Place Bet Payoffs

House Advantages:

Pass Bet

Come Bet

Field Bet

Don't Pass

Dont Come

Place Bets

Prop (Center) Bets

Place Bet Functions:

Same

Press

Down

Without Odds:	1.41%
With Single Odds:	0.80%

2 and 12 Doubled:	5.55%
2 or 12 Tripled:	2.77%

Without Odds:	1.40%
With Single Odds:	0.80%

4 or 10:	6.67%
5 or 9:	4.00%
6 or 8:	1.52%

Big Six/Big Eight	9.09%
Any Seven	16.67%
Any Craps	11.1%
Two Aces	13.89%
BoxCars	13.89%
Hard 4/Hard 10	11.1%
Hard 6/Hard 8	9.09%

4 or 10: 9 to 5
5 or 9: 7 to 5
6 or 8: 7 to 6

4 or 10: 2 to 1
5 or 9: 3 to 2
6 or 8: 6 to 5

Select **SET BETS** from the Button pad. A window will appear allowing you to set your bets to your liking.

Click with the **LEFT** mouse button on the portion of the playing field where you wish to bet.

Click with the **RIGHT** mouse button on the bet or on the bet's area.

Click with the **LEFT** mouse button on the bet after a point has been established.



Setting Maximum House Odds

To set the House Odds:

Select **SETTINGS** on the button pad. Click on the desired level of odds. Levels available are 1X, 2X, 3X, 5X, and 10X. Odds may be changed at any time, although for the sake of realism, you should decide what level of odds should be allowed at the start of a session

By far, the majority of Casinos allow 2X odds, although the trend today is to attract customers by offering 5X and 10X odds. It is to your advantage to play as many odds bets as possible, as the odds bet has no advantage for the Casino.

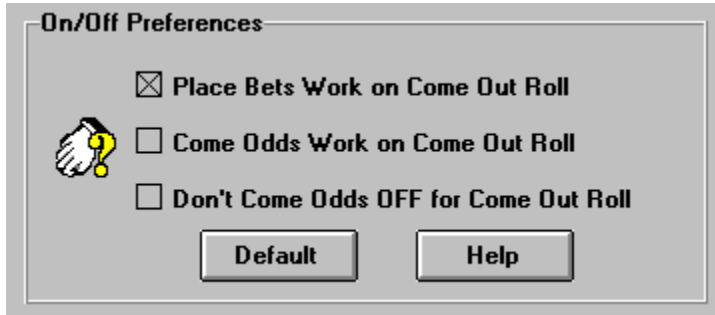
Please see [Odds Bets](#) for a description of how odds work and are played.



On/Off Options

Craps defaults to normal House rules regarding the status of a bet working or not. It is a legal and common practice to alter these rules verbally, by declaring a bet OFF or NOT WORKING, or in some cases ON or WORKING.

Craps allows you to alter these rules by selecting **SETTINGS** on the button pad. The Settings Window appears, allowing three options to be chosen.



Default Craps rules are all options *unchecked*. This means:
Place bets DO NOT WORK on the Come Out Roll.
Come Odds DO NOT WORK on the Come Out Roll.
Don't Come Odds WORK on the Come Out Roll.

In the above example, the player has elected to risk his place bets on any come-out roll. To do this in a Casino, declare to the dealer "My place bets are ON" when the dice are coming out.

If you are a beginner, leave these alone... unselected (No X mark), they are standard Casino Craps rules. A more advanced player can check any of the options.

Clicking the DEFAULT button unchecks all three boxes. CLOSE simply closes the Settings Window... your selections remain in effect.



The Settings Window

Clicking the SETTINGS button on the button pad will display this window. Here, you can control or set the size of the dice, dice animation speed, maximum House odds, working preferences, and some of the accessories built into Craps. Most of the items are self-explanatory.

Brings up a small Pop-Up menu with the following items:

- Exit
- About

If you exit in the middle of a hand with bets on the table, *these bets are lost...* it is the same as if you simply walked away from the table. Any Cash remaining in your chip rail is pocketed by you. You may now visit another game, or exit the casino as you desire.

Sets the desired action for a Place Bet win. These buttons will remain dim (*disabled*) until one of your Place bets hits... they will then light up and become active until the next dice roll. If you do not select an action, the game will play the bet as if you are using the *same bet* option.

See [Place Bet Functions](#) for an explanation of these terms.

32 *Across the Board* is a bet which covers all of the numbers with Place Bets in the following amounts: For the 4, 5, 9, and 10 - \$5. For the 6 and 8 - \$6. The total is, of course, \$32.

