



Learning How To Operate Casey

Practice inputting the card values (2 through 11. 1 is not a card value). Listen to the output. In a short amount of time you will become accustomed to the sounds. (Remember that to input, for example, a 3 you hit the 2 and 1 switch at the same time. This is true for all numbers other than 1,2,4,8.) Do not move ahead until you are comfortable inputting the card values and can recognize the outputs.

(Note: When you turn the computer on, when you input the third number, the output will not be the card value, rather it will be the "discard mode" output telling you that the computer is in the discard mode and is not playing blackjack.)

- II. Play single deck, one player. Follow the sequence below:
 1. Input 1-14,1 (shuffle code and number of decks)
 2. Input 1-9,1 (playing alone)
 3. Input 12 (new round)
 4. Input dealer's upcard (output = value of card) 5:
Input your first card (output = value of card)
 6. Input your second card (output = playing decision)
 7. When hand is over repeat 3,4,5
 8. When shuffle repeat 1,3,4,5

- III. Play multiple decks (sometimes one player, sometimes multiple players)

- IV. Study Instruction Guide during II and III above

- V. Practice with shoes

Language of Casey

Outputs:

Three codes:

dot = 1 (hear "dit")
 short dash = 3 (hear "dah")
 long dash = 0 (hear "da-ah") (also used as a minus sign if
 precedes a number)

e.g.: dot, long dash = 10
 long dash, dot, long dash = -10
 long dash, dot = -1

This "language" is used to define everything. For example, if you were to ask Casey the number of cards in a single deck, the output would be 52.

What you would actually hear is

dah,dit,dit dit,dit

5 2

e. g. 104: (two decks)

dit da-ah dah,dit

1 0 4

e.g. 208: (four decks)

dit,dit da-ah dah,dah,dit,dit

2 0 8

e.g. 312: (six decks)

dah . . dit . dit,dit

3 1 2

Inputs :

Keyboard

Designed for right hand only:

4 keys values left to right: 1, 2, 4, 8

Shoes

Values:		<u>left foot</u>	<u>right foot</u>
#1	upper right switch		
#2	lower right switch	4	1
#4	upper left switch	8	2
#8	lower left switch		

When inputting with shoes, always go down first, then up on rebound (in situations when you need to go both directions).

Buffer: = 100 milliseconds (same as hand keyboard); e.g., hit 8 & 2 at the same time, then quickly hit 1, and Casey will read this as 11.

Thus with the hand keyboard or the shoe switches, we can Input any number 1 through 15.

“Hearing” the numbers :

dit	= 1	dah,dah,dah	= 9
dit, dit	= 2	dit , <u>da-ah</u> (long dash)	= 10
dah	= 3	dit....dit	= 11
dah,dit	= 4	dit....dit,dit	= 12
dah,dit,dit	= 5	dit....dah	= 13
dah,dah	= 6	dit....dah,dit	= 14
dah,dah,dit	= 7	dit... dah,dit,dit	= 15
dah,dah,dit,dit	= 8		

Inputting values 1 through 15 with shoe switches:

Symbols : , = at the same time
 - = one after the other
 R = right foot
 L = left foot
 U = upper switch
 D = lower switch

1	R U	9	L D, R U (mirror image of 6)
2	R D	10	L D, R D
3	R D- R U	11	L D, R D - R U (10+1)
4	L U	12	L D-LU
5	L U, R U	13	L D, R U- L U (9+4)
6	L U, R D	14	L D, R D -L U (10+4)
7	L U, R D- R U (6+1)	15	L D, R D-L U,R U (10+5)
8	L D		

Card Values:

Numbers 2 through 11 (ace = 11). "1" is always the first part (prefix) of a Function. "1" is not a card value; "1" tells Casey that the next Input after "1" will be a Function (and will in fact define the specific Function).

Shuffle Codes:

1-12, X (X = number of decks = 1 through 8* see note)

Las Vegas Downtown rules (hit soft 17)

1-13,X

Northern Nevada rules (double on 10 & 11 only)

1-14,X

Las Vegas Strip rules (stand on soft 17)

1-15,X

Las Vegas Strip rules, with doubling after splitting allowed.
Also, Atlantic City.

*Note: Shuffle code for 8 decks has an addition. Ex. 1-14, 8, 10. You input 10 after 8 .

12:

Output: Deck Favorability (see below)

Meaning: Decision Mode ("New Round")

Input: Dealer's upcard first: _____ (will hear echo of card)

Your first card (will hear echo of card)

Your second card (will not hear echo of card; either A,B,
or C)

A) Discard mode signal (dit,dit,dit . dah . dit,dit,dit)
if you are playing with other players.

B) Output for a playing decision
if you are playing alone.

C) Output for an insurance decision
if dealer has an Ace as his upcard.

Deck Favorability:

Each number Casey gives you is worth 0.75% when playing single or double deck games, and 0.375; when playing four or more decks. When playing four or more decks, however, with one deck or less left to play, the Index reverts to 0.75%. For quick estimate of deck favorability, round numbers off : e.g.. 0.8 and 0.4.

Advantage (negative numbers indicate the opposite)

+1 > 0% < /= 0.8% (rounded)

+2 > 0.81% < /= 1.6%

+3 > 1.6% < /= 2.1%

etc.

0.8 times the # will always yield the upper threshold; e.g., an Index of +5 = 4 % maximum edge; +12 = 9.6% maximum edge. For four or more decks, multiply by 0.4%.

Playing Decision Outputs:

dot (dit)		= hit
long dash (<u>da-ah</u>)		= stand
two short dashes (dah,dah)		= double down
three short dashes (dah,dah,dah)		= split

The Abort Signal (dit,dit,dit,dit,dit) has several meanings depending upon the context:

- a) you have drawn to a total of 22 or more
- b) you held the switches down too long
"no harm done"
- c) when paired with a playing decision =
Surrender -- always comes after a playing decision; e.g.: dit dit,dit,dit,dit,dit
- Hit, Surrender if you can.

Insurance Decision Outputs:

Positive # - take Insurance

Negative # - do not take Insurance

0,0 - even (in other words, flip a coin)

(also, see Function 1-5 and Notes on Insurance)

14:

Output: A Decision

Meaning: Re- Decision Mode

You can move out of the Discard Mode if you are in it, and place Casey back into a Decision Mode (the Re-Decision Mode), In essence, you are asking Casey for an updated decision; he will give you either

- (1) Recalculation of a Betting Decision if only two cards
Inputted after 12. (If the 3-card input sequence after
a 12 has not been completed.)
- (2) Recalculation of a Playing Decision if the 3-card input
sequence after 12 has been completed.
- (3) Recalculation of an Insurance Decision if the 3-card input
sequence after 12 has been completed, but Casey has not
gone into the Decision Mode because the dealer's uocard
is an Ace.

Or, if you want to hear a decision again, Input 14. 14 can be
Considered "The Redecision Index"; or "A Repeat Key."

15:

Unassigned. If hit, will receive the Abort Signal.

Functions 1 through 11 (always preceded by "1")

If you Input "1" alone, the Output - the last non function Input (thus a variable, not a constant). Casey back spaces one Input in memory and echoes that Input.

1-1

Your way of coming out of the Function Loop. To verify your last Input, hit "1" output = echo of last non function Input; (hit "1" again)
Output = Abort, and puts you right back to where you were -- "no harm done."

1-2

Erases the last non-function Input. Use to back space and wipe out a whole string of numbers one at a time. You will hear a special Output:
dit,dit,ditdit,dit,dit. After Inputting "1", be sure to let the last non-function Input echo before Inputting 2. Also, let the special Output echo after Inputting the 2 before moving ahead.

(also, see 1-7)

1-3

Request number of cards remaining at that point.

1-4

Request for Casey to engage in hole card play. Output = same as 1-2.

1-4,X (X = dealer's hole card); new output = new playing decision.

After dealer turns over his hole card, input it again (Casey has not stored the card in memory in case of error), as well as any other cards.

(Note: Casey will always say stand on Hard 18 or more, Soft 19 or more regardless of the dealer's hole card.)

1-5 (has several separate uses):

- a) After Casey gives you an Insurance Decision, and the dealer does not have blackjack, Input 1-5 in order to force Casey out of the Insurance Mode into the Decision Mode; a "move ahead" signal;
Output - a Playing Decision,
- b) When you want to play multiple hands. Finish your first hand, then pick up your next hand and Input 1-5,X,Y (X,Y = your cards for the new hand). In this manner you can play as many hands as you like.
- c) The best way to explain 5c is by giving an example. You are playing in a casino that allows you to double down after splitting pairs (having previously shuffled with 1-15,X) and you receive 7,7 vs. dealer's upcard 6;
Casey tells you to split;
you receive a 10 on the first hand., and Casey says stand;
you receive a 4 on the second hand, and Casey says double down; you Input 13 (for the Discard Mode) and move ahead.

If, however, the order were to be reversed, the procedure would be a little different:

7,7 vs. dealer's upcard 6;

Casey tells you to split;

you receive a 4 on the first hand, and Casey says double down;

you Input 13 (for the Discard Mode);

you receive a 10 on the second hand - but, since you are in the Discard Mode

Casey cannot give you a Playing Decision.

Therefore, you Input 1-5 (asking for a Playing Decision, and moving out of the Discard Mode), followed by your 10, and Casey will give you the correct Playing Decision.

1-6

Is used if you cannot re-split pairs (or if you can only re-split to a certain number of hands). Output - same as 1-2 or 1-4.

For example, you receive 8,8 and Casey tells you to split, and you receive another 8. Casey may again tell you to split; if, however, that option is not available, Input 1-6,14 and Casey will give you a new decision (exclusive of a pair split in this case).

1-7

Casey returns to the last point in which you Inputted a 12 -- he erases every card that was Inputted after the last 12; in other words, he reverts back to 12 quickly. Output = dit.... dit,dit = "12"; (you do not have to Input 12 again at this point). The next Input should be the dealer's upcard.

1-8

"Unassigned".

1-9

1-9,X (X = 1 or 2)

1-9,1 = playing alone = immediate playing decision.

1-9,2 = playing with other players (to your right) = deferred Playing

Decision. 1-9,2 is the ordinary state of Casey when turned on; thus, if

You are playing with "other players," it is not necessary to do anything.

In 1-9,1 Casey will give you an immediate Playing Decision after Inputting your second card.

In 1-9,2 Casey will not give you an immediate Playing Decision after you Input your second card (you will receive the Discard Mode signal instead). If you do not see any additional cards, or after you have seen additional cards, and have Inputted these, and are ready for a Playing Decision, Input 14.

1-10

1-10,X (X = 1 or 10)

1-10,1 = play back what is left in the deck(s). First you will hear the number of decks previously shuffled, followed by the number of 2s left, number of 3s left, etc., up to the number of Aces left, followed by silence.

You will not hear anything after 10 portion of the Input. If too many cards have been removed, you will receive a special output when Casey reaches that card; e.g., five 7s removed from a single deck, when Casey reaches 7 the Output will be: dit,dit dah,dit,dit... dah,dit,dit (255). (also, see 1-11)

1-10,10 - "The Stack"; Casey will play back your last 49 Inputs (bytes), read back to front.

1-11,X (X - a card value, 2 through Ace)

If you want to put an extra card into the deck(s) for experimental purposes, e.g., 1-11,5 = you are putting an extra 5 into the deck(s).

You will not hear anything after the 11 portion of the Input, and X = Output equal to the number of Xs the deck(s).

Or, if you receive the "overload signal"_(long,long dash followed by value of card overloaded; e.g., long,long dash . . dah,dit,dit - too many 5s have been removed), you could put that particular card back into the deck(s) by Inputting 1-11,X (X = the card put back = 5, in this particular case).

Note 1 Releasing Tapper

When Casey is first turned on, the tapper(s) will lock down. It is important to release the tapper(s) by Inputting any key; e.g., Input "l". This locking will only occur immediately after Casey is turned on; after releasing the tapper(s), it will remain released until Casey is turned off and then on again. Do not, then, turn on the unit and leave it on without first activating an Input in order to release the tapper(s).

Note 2 Looping

Before perfecting Input accuracy, there may be times when Casey will no longer respond to any of your Inputs. This happens when you immediately put Casey into a loop, as a result of Inputting an invalid command. If this were to occur, simply turn unit off, then on again. This process will always clear any loop, since turning the unit off clears all memory.

Note 3 Batteries

When the batteries lose their power, you will no longer receive betting or playing decisions. You will hear the long dah sound instead.

Note 4 Computer placement

Computer is worn on the inside right side leg around the knee area. The wiring harness is designed with this in mind.

Note 5 Insurance

The Insurance Decision involves a simple mathematical problem based on the ratio of non-tens to tens.

At the top of a single deck (before any cards have been dealt), the ratio of non-tens to tens is 36 to 16 (greater than 2 to 1). Since Insurance pays 2 to 1, four non-tens must be removed before the ratio is exactly 2 to 1 (32 non-tens, 16 tens); at this point insurance would be a dead even bet.

For example, an Insurance index of +1 from Casey would indicate that the ratio of non-tens to tens is slightly under 2 to 1 and taking Insurance is favorable.

We can make the same calculation mentally by assigning the value -2 for tens and +1 for any non-ten (including Aces). Since the ratio of non-tens to tens at the top of a single deck is 36 to 16, we begin our count at -4 to compensate for the imbalance (double deck we begin at -8; four decks at -16; six decks at -24).

Playing example, first round of a single-deck game:

Dealer's upcard Ace

Player's cards 8,3 (two non-tens)

Insurance Index - -1 (beginning, the count at -4 and adding +1 for every non-ten).

Let's say, however, that after Casey gives you -1 as the Insurance Index, you get a glimpse of your neighbor's cards and his hand is 9,7 (also two non-tens). Adding +2 for the two extra non-tens to Casey's Index of -1, your Insurance Index now - +1, and taking Insurance is a slightly favorable bet

Knowing how to make this mental calculation (or mental update), then, has practical value. If Casey gives you an Insurance Index that is zero zero (ratio exactly 2 to 1), or close to zero, zero, and you see other cards, you can then mentally update the Insurance Index.

When playing with other players in a face-up game you can simply Input their cards while Casey is still in the Insurance Mode, and he will make the same calculation for you, and give you an updated Insurance Index. Another benefit of doing it this way is that Casey will have more cards in memory should you need a Playing Decision. Making the mental update is most useful when you are playing two or more hands. After receiving an Insurance Index from Casey, you can look at your second hand(s) and adjust the Index. If you Input the cards in your other hand(s), you will, of course, receive an updated Insurance Index. But now Casey has stored your second hand(s) in his memory. When you play your other hand(s), he will remove these cards from the deck once again. Thus to prevent overloading, as well as an inaccurate reflection of the deck, you would need to put your second hand(s) back into the deck before playing the hand (see Function 11). It would be much easier to simply look at your second hand(s) and make a mental update before deciding whether to take Insurance or, not

Notes on the Shoes:

Shoes must be 1 size to 1 ½ size larger than your normal size to have room for the toe switches above your toe areas.

They must be wide enough and stiff enough on top to hold the switches, velcroed. in.

The top and bottom of the shoes must have Velcro, so that the switches can be adjusted.

The bottom area must have a valley or recessed area so that the switch is lower than your foot.

The wiring of the switches should run along the inside length of the shoe.

The tickler should be in the arch area of the shoe, slightly above the heel. Some shoes have an arch support metal plate which needs to be removed.

3 Methods of Shoe Design

Cheapest: do it yourself. Using casual shoes with rubber soles that you can cut yourself. Casual shoe must have a thick enough sole so that you can create a rectangular hole in the arch area to hold the tickler. You must cut a plug out of the sole on top which is then lowered by about half its' thickness. This must not be damaged as it is glued back in..

Expensive: using a shoemaker. After selecting a leather or dress shoe, the shoemaker removes the heel and the arch support. In the arch area, he makes a square hole for the tickler, cutting completely through the sole. Cuts a hole in the toe area resembling a half circle . Now you have 2 holes . He adds a new sole completely over the old one. You now have a double sole. Install heel

Simple: elevator shoes. These shoes have removable lifts which can be easily cut creating the same results as the other 2 methods. Website: elevatorshoes.com. You can send for a catalog. Cut a slice about an inch from the top of the inner lift and a hole for the tickler.