

## CONTENTS

Sample Game KC3301

	Pages
Game Description Summary	2 to 4
Section 1 Base Game Calculations	5
Section 2 Reel Strips Layout	6
Section 3 Bonus Games	7 to 8
Section 4 Total Game Profile	9 to 10
Section 5 Volatility Measures	11 to 12

KellyCom games are based on total random operation of all game functions. Games utilising non-random event occurrences are not designed by KellyCom and will not be supplied under any circumstance.

KellyCom prefers to develop games to customer specifications. To this end, a game parameters form can be supplied on request.

Game Description Summary

Model : KC3301 v. 1.0

Game Denomination : 30p

Prize	Return	Base Game Prize Schedule			Prize ( p )
		Reel 1	Reel 2	Reel 3	
5	0.079%	Seven	Seven	Seven	2500
10	0.200%	Crown	Crown	Crown	1000
20	0.450%	Bell	Bell	Bell	750
30	0.340%	Orange	Orange	Orange	600
40	0.439%	Grape	Grape	Grape	450
50	0.454%	Plum	Plum	Plum	300
60	30.101%	Cherry	Cherry	Cherry	120
70	0.477%	Cherry	Cherry	-----	90
90	11.084%	Cherry	-----	-----	60
100	1.280%				
120	2.956%				
200	0.807%				
250	1.513%				
300	5.911%				
450	3.695%				
500	0.336%				
600	8.867%				
750	3.695%				
1000	3.284%				
2000	4.035%				
2500	2.725%				
	<u>82.728%</u>				

  

Symbol Distribution		
Symbol	Reel 1	Reel 2
Seven	1	3
Crown	3	2
Bell	6	2
Orange	3	6
Grape	5	3
Plum	6	4
Cherry	6	6
	<u>30</u>	<u>26</u>
	<u>30</u>	<u>30</u>

Bonus Games Feature

Superimposed over selected symbols on each of the reels is a Bonus Symbol [ see Section 2 ]. Whenever 3 of these symbols align on the centre playline, a series of 5 bonus games is begun with the next play.

These bonus symbols are distributed across the reels as:

Reel 1	Reel 2	Reel 3
4	4	12

This results in a series of bonus games once every 109 base game plays on average.

During the bonus series of games, the Base game prize schedule is suspended, and each bonus game outcome is determined by whether a bonus symbol appears on the centre playline of the 3rd reel only. Whenever a bonus symbol appears during the feature series, a counter is incremented by 1. If no bonus symbol appears, the counter remains at its current value. The counter is set to zero at the beginning of a feature series.

Each game of a bonus series wins a prize irrespective of whether a bonus symbol appears for the particular play. The value of the prize is determined by two intersecting events: the value of the counter following the play; and the game number of the 5 possible. The prize value grid is :

Game #	Bonus Counter Value					
	0	1	2	3	4	5
1		10				
2		20	20			
3		30	40	100		
4		50	60	200	500	
5		70	100	250	2000	2500

From this grid, if the 5 bonus games are played without the counter incrementing from 0, the sum of the prizes paid for the 5 bonus games would be 175p; that is 5 + 10 + 20 + 40 + 100. Further illustrations are:

Bonus Symbol occurrence	Game 1	Game 2	Game 3	Game 4	Game 5	Total Prize
Y	Y	Y	N	N	N	230p
N	N	Y	Y	Y	N	515p
N	N	N	Y	N	Y	185p
Y	Y	Y	Y	Y	N	1,630p

**In this version of this sample game (KC3301), the cost to the player for each bonus game played is the same as the cost per game for each base game played; viz., 30p.**

This sample game is based on a generic template. The percentage return settings are readily developed through use of this template. The bonus games could also be converted to free to play games which in this sample would result in an increase to the percentage return to the player of 3.394%.

SECTION 1 - BASE GAME CALCULATIONS

KC3301v1.0

Symbol Distribution

Symbol	Reel 1	Reel 2	Reel 3
Seven	1	3	2
Crown	3	2	4
Bell	6	2	3
Orange	3	6	6
Grape	5	3	4
Plum	6	4	6
Cherry	6	6	5
	30	26	30

Base Game Cycle 23400

Basic Bet Unit Value 30p

	1	2	3	4	5	6	Hits	Prize [p]	Payout	Percentage
Seven	1	2	3	4	5	6	6	2500	15000	2.14%
Crown	3	4	2	4	6	6	24	1000	24000	3.42%
Bell	6	3	2	3	6	6	36	750	27000	3.85%
Orange	3	6	6	6	6	6	108	600	64800	9.23%
Grape	5	4	3	4	6	6	60	450	27000	3.85%
Plum	6	6	4	6	6	6	144	300	43200	6.15%
Cherry	6	5	6	6	6	6	180	120	21600	3.08%
Cherry	6	25	6	6	6	6	900	90	81000	11.54%
Cherry	6	30	20	6	6	6	3600	60	216000	30.77%
							5058		519600	74.02%

Hit Rate 4.63

SECTION 2 - Reel Strips Layout

Position	Reel 1	Reel 2	Reel 3
1	Seven	Seven	Seven
2	Cherry	Cherry	Orange
3	Bell	Grape	Cherry
4	Plum	Orange	Plum
5	Grape	Cherry	Crown
6	Cherry	Plum	Orange
7	Orange	Orange	Grape
8	Bell	Bell	Cherry
9	Plum	Seven	Bell
10	Grape	Orange	Plum
11	Cherry	Grape	Orange
12	Bell	Cherry	Cherry
13	Crown	Plum	Grape
14	Plum	Bell	Seven
15	Orange	Cherry	Plum
16	Grape	Orange	Orange
17	Cherry	Crown	Crown
18	Bell	Cherry	Cherry
19	Plum	Seven	Plum
20	Grape	Plum	Bell
21	Crown	Crown	Orange
22	Cherry	Orange	Crown
23	Plum	Cherry	Grape
24	Bell	Grape	Cherry
25	Crown	Plum	Plum
26	Cherry	Orange	Bell
27	Orange		Orange
28	Grape		Crown
29	Bell		Grape
30	Plum		Plum

3 of the overprint icons on the centre  
playline triggers the bonus game

5 bonus prize games are available to  
the player during which a prize win is  
guaranteed for each play. Only the 3rd reel  
is active for bonus games. The Base game  
is suspended during the bonus games.  
Each bonus game requires a stake of  
30p by the player.

SECTION 3 - Bonus Game

The number of bonus series game triggers is 192 [ 4 x 4 x 12 ]

Following each trigger, 5 bonus games are played. During the bonus games, the event of interest is whether a overprint icon appears on the centre line of the 3rd reel.

The probability of an icon appearing is 0.4

Each time an icon appears, a counter is increased by 1 [ the counter starts at 0 ]

Each time the counter increments, the prize column correlating to the counter value is activated. The prize matrix is:

	Bonus Counter Value					
	0	1	2	3	4	5
Game #						
1		5	10			
2		10	20	20		
3		20	30	40	100	
4		40	50	60	200	500
5		100	70	100	250	2000
						2500

During the bonus games, the following outcomes would generate the prizes shown

	Game 1	Game 2	Game 3	Game 4	Game 5	Total Bonus Wins/Series
Example 1	Hit 10	Miss 20	Miss 30	Hit 60	Hit 250	370
Example 2	Hit 10	Hit 20	Hit 100	Hit 500	Hit 2500	3130

The probability matrix for the bonus game series is as follows.

Game #	Counter Value					
	0	1	2	3	4	5
1	0.6	0.4				
2	0.36	0.48	0.16			
3	0.216	0.432	0.288	0.064		
4	0.1296	0.3456	0.3456	0.1536	0.0256	
5	0.07776	0.2592	0.3456	0.2304	0.0768	0.01024

The Frequency of occurrence for each possible prize value is, therefore:

Game #	Counter Value					
	0	1	2	3	4	5
1	115.2	76.8				
2	69.12	92.16	30.72			
3	41.472	82.944	55.296	12.288		
4	24.8832	66.3552	66.3552	29.4912	4.9152	
5	14.92992	49.7664	66.3552	44.2368	14.7456	1.96608

Triggers  
192

Total  
Bonus Games  
960

Total Payout Table

Game #	Counter Value					
	0	1	2	3	4	5
1	576	768	0	0	0	0
2	691.2	1843.2	614.4	0	0	0
3	829.44	2488.32	2211.84	1228.8	0	0
4	995.328	3317.76	3981.312	5898.24	2457.6	0
5	1492.992	3483.648	6635.52	11059.2	29491.2	4915.2

Total Payouts  
84979.2

SECTION 4 - Total Game Profile

The consolidated table of bonus game prize/frequencies is:

Prize	Average Frequency	Total Average Payout
5	115.2	576
10	145.92	1459.2
20	164.352	3287.04
30	82.944	2488.32
40	80.1792	3207.168
50	66.3552	3317.76
60	66.3552	3981.312
70	49.7664	3483.648
100	93.57312	9357.312
200	29.4912	5898.24
250	44.2368	11059.2
500	4.9152	2457.6
2000	14.7456	29491.2
2500	1.96608	4915.2
		<u>84979.2</u>

Consolidation of the Base Game + the Bonus Games

5	115.2	576	0.079%
10	145.92	1459.2	0.200%
20	164.352	3287.04	0.450%
30	82.944	2488.32	0.340%
40	80.1792	3207.168	0.439%
50	66.3552	3317.76	0.454%
60	3666.355	219981.31	30.101%
70	49.7664	3483.648	0.477%
90	900	81000	11.084%
100	93.57312	9357.312	1.280%
120	180	21600	2.956%
200	29.4912	5898.24	0.807%
250	44.2368	11059.2	1.513%
300	144	43200	5.911%
450	60	27000	3.695%
500	4.9152	2457.6	0.336%
600	108	64800	8.867%
750	36	27000	3.695%
1000	24	24000	3.284%
2000	14.7456	29491.2	4.035%
2500	7.96608	19915.2	2.725%
		<u>604579.2</u>	82.728%

Base Game Cycle	23400		
Game Denom (p)	30		
Base Cycle Value	702000	Standard Deviation	18.362
Bonus Game Cycle	960		
Bonus Denom (p)	30		
Bonus Cycle Value	28800		
	<u>28800</u>		
	<u>730800</u>		

SECTION 5 - Volatility Measures

Volatility Table

Percentage Return 82.728%  
 Std.Dev. 18.362  
 C.I. 95%

# Games	Expected Percentage Range	
	Low	High
50,000	66.6%	98.8%
100,000	71.3%	94.1%
200,000	74.7%	90.8%
300,000	76.2%	89.3%
400,000	77.0%	88.4%
500,000	77.6%	87.8%
600,000	78.1%	87.4%
700,000	78.4%	87.0%
800,000	78.7%	86.8%
900,000	78.9%	86.5%
1,000,000	79.1%	86.3%
1,100,000	79.3%	86.2%
1,200,000	79.4%	86.0%
1,300,000	79.6%	85.9%
1,400,000	79.7%	85.8%
1,500,000	79.8%	85.7%
1,600,000	79.9%	85.6%
1,700,000	80.0%	85.5%
1,800,000	80.0%	85.4%
1,900,000	80.1%	85.3%
2,000,000	80.2%	85.3%
2,100,000	80.2%	85.2%
2,200,000	80.3%	85.2%

Player Return 0.82728  
 Std.Dev. 18.362

Operator's Risk Table					
Games Played	Probability of Operator loss within the ranges and at the play rates shown			Possibility of Payouts exceeding 100%	
	0 to 2 % of total bet	2 to 4 % of total bet	4% to 6% of total bet More than 6% of total bet		
50,000	0.007999	0.004673	0.002494	0.002299	1.746%
100,000	0.000439	0.000327	0.000094	0.000031	0.089%
200,000	0.000001	0.000001	0.000000	0.000000	0.000%
300,000	0.000000	0.000000			0.000%
400,000					0.000%
500,000					0.000%
600,000					0.000%
700,000					0.000%
800,000					0.000%
900,000					0.000%
1,000,000					0.000%
2,000,000					0.000%
3,000,000					0.000%
4,000,000					0.000%
5,000,000					0.000%
10,000,000					0.000%