June 22, 2020

Jacqueline Hunter
Scientific Games
6601 S. Bermuda Rd.
Las Vegas, NV 89119

Dear Ms. Hunter,

Due to COVID-19 and at the manufacturer's request, the following games can be dealt face-up until further notice:

| Caribbean Stud Poker | Crazy 4 Poker |
| :--- | :--- |
| Crazy 4 Poker Progressive | Four Card Poker |
| Four Card Poker Bad Beat Bonus | Four Card Poker Progressive |
| Let it Ride | Let it Ride Bonus |
| Let it Ride Progressive | Mississippi Stud |
| Mississippi Stud Progressive | Mississippi Stud with 3 Card Bonus |
| Three Card Poker | Three Card Poker, 6 Card Bonus |
| Three Card Poker Bonus | Three Card Poker Face Up |
| Three Card Poker Progressive | Ultimate Texas Hold'em |
| Ultimate Texas Hold'em Bad Beat Bonus | Ultimate Texas Hold'em Progressive |
| Ultimate Texas Hold'em Ultimate Pairs Bonus |  |

No other modifications to the dealing procedures, game rules, or payouts are authorized.

Prior to implementing face-up dealing, licensees should

- Review "Scientific Games - Table Game Operations Impact of Dealing Games Face Up", which is attached;
- Consider how play in this manner could affect the odds, play on the game, and be conducted in compliance with any state or county imposed COVID-19 public health requirements; and
- Submit their internal controls and receive approval from the Commission.

Ms. Hunter
June 22, 2020
Page 2 of 2
If you have any questions on commercial implementation, please contact Brian Lane at (509) 387-7095. If you have any questions on Tribal implementation, please contact Kelly Main at (206) 423-4260.

Sincerely,


Tina Griffin
Assistant Director
Licensing, Regulation, and Enforcement
Attachment - "Scientific Games - Table Game Operations Impact of Dealing Games Face Up"

# Scientific Games - Table Game Operations Impact of Dealing Games Face Up 

The purpose of this report is to analyze the approximate impact of dealing several Scientific Games proprietary table games 'face up'. It is assumed that no more than THREE Players will be playing at the same time and that all cards normally dealt to the Player will be dealt face up.

Introduction:
It is a given that providing the Player with any additional information about the cards that have already been dealt can only allow the Player to enhance his strategy and reduce the house edge and potentially turn it into a Player edge. In this particular case, the additional information is knowledge about the other Players’ cards which would normally be kept hidden from the other Players. Knowledge about these cards can inform the Player both about his potential draws (if any exist) and about the Dealer's potential hand.

This is a little like Blackjack card counting with one very important distinction. In Blackjack, knowledge about the cards remaining in the shoe can be used to determine how much the Player should wager on the next hand. This is what provides the biggest advantage to the Player. In Blackjack, the Player may get an advantage in only $10 \%$ of the hands and by just $0.25 \%$. If a Player could not alter his wager size with this knowledge, the Player would not have an overall advantage. But, if he can increase his wager 50x on these hands, the overall payback over time would show a Player advantage.

In single deck games, this is not possible. The Player has no opportunity to change his initial wager size. Instead, he is only able to alter his strategy in-game and in some cases, his in-game wager size. This greatly reduces the Player's ability to take advantage of 'player advantage' situations.

The goal of this analysis is to get a rough idea of the impact of the Player being able to see the hands of two additional Players. This is not intended as a comprehensive analysis as that would likely take weeks per game to do properly. Instead, the main purpose is to ascertain if playing the game face up poses a significant risk to the casino. Because of this, parts of the analysis relied on work done and published by another analyst - Stephen Howe. In each case where I leverage his work, I have included the URL of the column that I utilized.

## Three Card Poker

Three Card Poker has a single strategy point - when to Play vs. Fold. Thus, knowing what the additional six cards are, can guide the Player by changing the distribution of potential Dealer hands. Mostly, it can tell the Player how often the Dealer will not qualify which can changed the strategy for Jack or less hands. If 4 out of the 6 cards are $\mathrm{Q} / \mathrm{K} / \mathrm{A}$, the hand becomes a marginal Play. With 5 or 6 , much more strongly, but it is rather rare for 5 of the 6 to be $\mathrm{Q} / \mathrm{K} / \mathrm{A}$. In similar fashion, if all 6 cards are low cards, there are some Q-6, Q-7 hands that should be Folded because there is a greater likelihood that the Dealer will qualify and doing so means he will likely beat the Player. While it is much more common for all 6 cards to be low, the impact is to a limited number of Player hands and the impact is not great as these hands are only marginal plays. If the Player has above a Q-8 or Q-9, the strategy is still to always Play.

Based on simulations using the strategy changes, the impact to payback would appear to be only about $0.1 \%-0.2 \%$ at most with 6 additional cards displayed.

## Let It Ride

As Let It Ride is a paytable game, the impact is only on the Player's hand. The Player may see cards that he needs to complete his hand that have been burnt, which can reduce the potential value of his hand. Or, conversely, he may see that his needed cards are still available out of the remaining deck, with a slightly increased probability of being dealt to him.

That said, however, Let It Ride's relatively high house edge is unlikely to be able to be overcome as a result of seeing 6 additional face up cards. Given the mandatory ' $\$$ ' wager with a payback of only $62.7 \%$, the ' 1 ' and ' 2 ' wagers would need to get a significant advantage out of those 6 cards. But, the vast majority of hands wagered are guaranteed winners. That said, there are a few strategy changes that would occur as a result of seeing the extra 6 cards.

## '1' Wager

- Do not wager any 3-Card SFL or Royal if any of the out cards for the SFL/Roy have been burned
- Wager all 3-Card Inside SFLs if none of the 6 other cards are of the same suit.
- Wager a Low Pair, IF none of the 6 cards are of the same rank as either of the Player's rank


## '2' Wager

- If you have a 4-Card Flush and all 6 of the other cards are of same suit, don't make wager - If you have a 4-Card Flush with 0 High Cards and 5 of the other cards are of same suit, don't make wager
- If you have a 4-Card Straight with 0 High Cards, and 2 of your (Straight) outs are burned, don't make the wager
- If you have a 4-Card Straight with 1 High Card and 3 of your (Straight) outs are burned, don’t make the wager
- If you have a 4-Card Straight with 2 High Cards and 4 of your (Straight) outs are burned, don’t make the wager
- If you have a 4-Card Straight with 3 High Cards and 5 of your (Straight) out are burned, don't make the Wager

The biggest strategy impact is the wagering of a Low Pair in the ' 1 ' wager. This increase the payback by roughly $0.2 \%$. The other changes occur infrequently and likely do not add more than another $0.1 \%$. The overall impact should be at most $0.3 \%$ to the house advantage.

## Ultimate Texas Hold'em

UTH is one of the more likely games to be impacted by the Player's cards being dealt face up. With a small theoretical house advantage, it does not take much movement of the payback to potentially give the Player an advantage over the house.

That said, there are several features of UTH that work against this from happening. The first is that there are only TWO cards per Player dealt. So, the Player only gets to see four additional cards. For the Player to take advantage of the situation, the information must be actionable. If a Player has an AK and one of the 4 face up cards is also an Ace, this will reduce the Player's expected value of the hand, but not by enough to change how he should wager - he should still Wager 4x.

The impact of any strategy change to the overall payback is controlled by 2 factors. How often the situation occurs and how much it increases the expected value of that situation. From running a variety of scenarios, the number of situations in which the Player changes his strategy is rather small. Thus, the overall impact to the payback is also very small. The fact that the remaining cards are community cards shared between Player and Dealer also means that cards that are burnt that might hurt the Player can also likely hurt the Dealer as well.

Lastly, the strategy of UTH is already extremely complex. The theoretical payback can only be achieved by a tiny fraction of Players. The ability to go further and take into account the face up cards would reduce this population even further.

For my conclusion, regarding UTH, I am also relying on a more exhaustive analysis performed by Stephen Howe that can be found here: https://discountgambling.net/2010/01/15/practical-collusion-for-ultimate-texas-holdem/

In the end, I don't believe any human could possibly achieve a Player advantage with only two additional Player's cards turned Face up on a live game.

## Caribbean Stud Poker

For Caribbean Stud Poker, I mostly relied on work already done by Stephen Howe. His column can be found here:
https://discountgambling.net/category/caribbean-stud/

There are actually 2 columns at the site. They both use a method that might be considered 'cheating' when the cards are dealt face down but would become unnecessary with cards dealt Face Up. The method mostly deals with counting cards that match the Dealer’s Face up card and counting the number of Aces and Kings.

Per Mr. Howe's column the house edge of 5.32\% (as a percent of the Ante) can be turned into a $1.1 \%$ Player advantage using his methods when there are 7 Players at the table. Per his second column, with only 6 Players, it can be turned into a $0.4 \%$ House edge using a computer and a more realistic $1.32 \%$ house edge using a simplified strategy.

Because Caribbean Stud has 5 cards per Player, dealing potentially 25-30 additional cards face up, can be very advantageous to the Player. With only an additional 10 cards being show on a 3 Player table, the number of times the Player will alter from basic strategy will be greatly reduced.

There is nothing in his column that talks about the impact of less Players at the table. However, if going from 7 Players to 6 Players reduced the impact by as much as $1.5 \%$ (of the Ante), I feel it is safe to assume that no Player will be able to come close to a Player advantage playing at a 3Player table. Undoubtedly, a few Players will be able to shave a little off the house edge, but it is doubtful that it would be more than $0.25 \%$ of total wager.

## Mississippi Stud Poker

For Mississippi Stud Poker, I again relied on work already done by Stephen Howe. His columne can be found here:
https://discountgambling.net/mississippi-stud-ev-barona/
I don't know if Barona still does, but apparently it did offer MS Stud face up with up to 6 players. Per Mr. Howe's analysis, when the Player can see all 12 cards belonging to the Players, he can turn the $4.91 \%$ house edge into a roughly $1.5 \%$ Player edge. It should be noted that the numbers that he references are a \% of the initial Ante and not total wager. When the average wager size is taken into account, this correlates to a house edge of $1.37 \%$ of the total wager. The $1.5 \%$ Player edge is really a Player edge of about $0.42 \%$ of total wager.

Thus, the total swing is about $1.8 \%$. If the impact of seeing each additional Player's cards were linear, this would mean each Player's cards that could be seen would be worth about $0.36 \%$ of total wager. My experience in doing these analyses would indicate that the impact is not linear but more exponential. Thus seeing 2 Player's cards is worth far LESS than $40 \%$ of the total. The true impact is likely to be less than a payback of $99.4 \%$ and probably closer to about $99 \%$.

It should also be noted that the strategy for Mississippi Stud is moderately complex and utilizing the face up cards to modify the strategy will require a Player to calculate outs on the fly. There will not be many Players who will be able to do this. Some very skilled Players might be able to lower the house edge, but it is unlikely that any will be able to gain a Player advantage.

## Four Card Poker

Four Card Poker follows a structure similar to Three Card Poker with a couple of key differences. The majority of the impact of face up cards in Three Card Poker is the impact they have on the Dealer qualifying. There is no Dealer qualifying in Four Card Poker, so this is no longer an impact. In Four Card Poker, the Dealer has one card turned face up. Thus, the Player can look for at the other face up cards for rank matches to the Dealer's upcard. This will impact the Dealer's ability to draw Pairs+. The Player may also be able to take into account cards of higher rank this his own Pair and/or Aces when he is playing a non-Pair hand.

Like Three Card Poker, there will be a handful of changes, but they will not add up to much. In Stephen Howe's column on collusion for Four Card Poker, found here:
(https://discountgambling.net/category/four-card-poker/), he states that with 6 Players at the table the house edge can be cut in half. As we are talking about a situation of only 3 Players, the impact will be far less and again is likely to be no more than $0.25 \%$ of total wager.

## Crazy 4 Poker

Crazy 4 Poker is more similar to Three Card Poker than is Four Card Poker. There is no Dealer card dealt Face up, but there is qualifying. So, like Three Card Poker, most of the impact surrounds the frequency that the Dealer qualifies. While the ability to wager 3 x might be a factor as well, it can only be done with a Pair of Aces or better, mostly removing it from the equation. Like Three Card Poker, the impact to being able to see additional cards will be minimal and most Players will not be able to take advantage.

## Conclusion

None of my own research nor anything I could find elsewhere would indicate that any of the games mentioned in this report can be 'beaten' by dealing a total of 3 hands face up. The extent by which a Player can reduce the house edge will depend on the specifics of each game. In all cases, it would take a very well-trained Player to do so.

Some likely indications that a Player might be attempting to fully use the information available would be one that is playing relatively slowly. As many of the strategy changes require counting 'outs', a Player utilizing these strategies will have to study far more cards than normal.

Generally speaking, any Player who considers himself to be an ‘Advantage’ Player, believing himself to have an advantage over the house will unlikely play any of the side-bets, which generally have lower paybacks and do not have any opportunities to reduce the house edge as a result of the additional information.

| Game | Maximum <br> Spots <br> Recommended |
| :--- | :---: |
| Caribbean Stud Poker | 5 |
| DJ Wild Stud Poker | 4 |
| I Luv Suits | 5 |
| Mississippi Stud | 4 |
| Crazy 4 Poker | Not Beatable |
| Face Up Pai Gow Poker | Not Beatable |
| Fortune Pai Gow Poker | Not Beatable |
| Four Card Poker | Not Beatable |
| Let it Ride | Not Beatable |
| Three Card Poker | Not Beatable |
| Ultimat Texas Hold'em | Not Beatable |

June 27, 2018

Bo Zarach
Bally Technologies
6601 S Bermuda Rd.
Las Vegas, NV 89119

## RE: SG Multi-Game Submission, Adding Multi-Link Paytables

Dear Ms. Zarach,
We have reviewed the changes made to the below listed games. You added two multi-level progressive jackpot paytables to the multi-link game rule section for each of the listed games. Based on our review of the documentation we received from Bally Technologies, the Washington State Gambling Commission will approve the changes made to your game under the conditions listed below:

- Caribbean Stud
- Crazy 4 Poker
- DJ Wild Stud Poker
- Four Card Poker
- Flushes Gone Wild
- Let It Ride
- Mississippi Stud
- Texas Hold'em Bonus
- Three Card Poker
- Ultimate Texas Hold'em


## Commercial Card Rooms

- The game shall be played and operated under the terms and conditions set forth under the "Rules of Play", you provided and are enclosed.
- Commercial card room operators seeking to operate this game must first submit their internal controls and receive approval from the Commission prior to implementing.
- Manufacturers and distributors of graphic layouts and/or any other equipment associated with the game must be licensed by the state prior to the sale of the equipment.


## Tribal Casinos

- Each Tribal Gaming Operation must request and obtain approval from their respective Tribal Gaming Agencies (TGA).
- Before TGA allows your games) to operate, they will seek concurrence from our agency as well.
- In addition to your approved rules, the Tribal submission to us must include all supplemental information required by Tribal-State Compact Appendix A, Section 18.
- Manufacturers and distributors of graphic layouts and/or any other equipment associated with the game must be certified by the state and licensed by the Tribe prior to the sale of the equipment.

Any modifications to this game may affect this approval. Contact the Commission should you contemplate modifications. If you have any questions on commercial implementation, please contact Brian Lane at (509) 886-6231. If you have any questions on Tribal implementation, please contact Kelly Main at (206) 423-4260.

Thank you for your cooperation and willingness to comply with the gambling laws of Washington State.

Sincerely,


Tina Griffin
Assistant Director
Licensing, Regulation and Enforcement Division
Enclosure
cc: Jim Nicks, Special Agent in Charge, Regulation Unit
Cathy Harvey, Special Agent in Charge, Tribal Gaming Unit Brian Lane, Special Agent, Regulation Unit Kelly Main, Special Agent Supervisor, Tribal Gaming Unit File


## TRAINING MANUAL

## OVERVIEW

Ultimate Texas Hold'em features head-to-head play against the dealer and an optional bonus bet.

Players and the dealer each receive two cards. They combine them with five community cards to make their best five-card hand.

Ultimate Texas Hold'em lets players bet aggressively. The earlier they bet, the more they can risk-and win. If players bet pre-flop, they may risk $3 x$ or $4 x$ their Ante. If they bet on the flop, they may bet $2 x$ their ante. And if they wait until the river-when all community cards are out-they may only bet 1 x their Ante.

This game also features an optional bet, the Trips Bonus. Players win the Trips Bonus if their final five-card hand is three of a kind or higher. Odds printed on layout.

## SHFL entertainment recommends using an automatic shuffler such as an ACE®, Deck Mate® or iDeal® shuffler.

## Deck Mate® Shuffler

## RECOMMENDED DEALING PROCEDURES

1. When using the Deck Mate ${ }^{\circledR}$, the entire deck is delivered by the shuffler, and the following dealing procedures will be completed with a hand held deck.
2. To begin the game, players must make equal bets on the Ante and Blind. They may also make a Trips bet.
3. Working from left to right, the dealer gives each player and himself two starting cards, face-down.
4. Players now have a choice:
a. Check (do nothing); or
b. Make a Play bet of $3 x$ or $4 x$ their Ante.
i. Once players bet, they cannot bet again and they cannot change their bet.
5. The dealer then places the first three community cards (the flop) face-up on the layout.
6. Players that have not yet made a Play bet have a choice:
a. Check; or
b. Make a Play bet of 2 x their Ante.
7. The dealer then places the final two community cards (the turn and river) face-up on the layout.
8. Players that have not yet made a Play bet have a choice:
a. Fold; or
b. Make a Play bet of 1 x their Ante.
9. The dealer then reveals his two hole cards and announces his five-card hand.
10.The dealer needs a pair to qualify.
a. Caution: Ultimate Texas Hold'em handles qualifying differently than other games. When the dealer doesn't qualify, it's not an automatic win for the player.

## When the dealer qualifies:

11. Working from right to left, the dealer combines each player's hole cards with the community cards to make the best five-card hand.
a. If the player's hand beats the dealers, the Play and Ante bets win even money.
b. If the player's hand loses to the dealer, the Play, Ante and Blind bets lose.
c. When the hands tie, the Play, Ante and Blind bets push.
d. The Blind bet wins when the player wins with a straight or higher. See layout for odds.
e. If the player wins with less than a straight the Blind pushes.
f. The Trips bet wins if the player has three of a kind or better. See layout for odds.

## When the dealer doesn't qualify:

12.The dealer, working from right to left, refunds each player's Ante bet. He does this before looking at any of the player's hands.
13.Then, again working right to left, resolves the action normally (see above).

Note: If the player has three of a kind or better, he always wins the trips beteven if he folds.

## ACE® ${ }^{\circledR}$ and iDeal ${ }^{\circledR}$ Shufflers

## RECOMMENDED DEALING PROCEDURES

1. Set the ACE® or iDeal® shuffler to the "UTH" mode. Contact your SHFL entertainment service technician for assistance.
2. To begin the game, players must make equal bets on the Ante and Blind. They may also make a Trips bet.
3. The iDeal will first dispense the five community cards. Spread these out-face down-in the middle of the table.
4. Working from left to right, the dealer gives each player and himself a set of two starting cards.
5. After the dealer gives himself two cards, he presses the green button on the shuffler to dispense the remaining cards.
6. Players now have a choice:
a. Check (do nothing); or
b. Make a Play bet of $3 x$ or $4 x$ their Ante.
i. Once players bet, they cannot bet again and they cannot change their bet.
7. The dealer then reveals the first three community cards.
8. Players that have not yet made a Play bet have a choice:
a. Check; or
b. Make a Play bet of $2 x$ their Ante.
9. The dealer then reveals the final two community cards (the turn and river).
10. Players that have not yet made a Play bet have a choice:
a. Fold; or
b. Make a Play bet of 1 x their Ante.
11.The dealer then reveals his two hole cards and announces his five-card hand.
12.The dealer needs a pair to qualify.
a. Caution: Ultimate Texas Hold'em handles qualifying differently than other games. When the dealer doesn't qualify, it's not an automatic win for the player.

## When the dealer qualifies:

13. Working from right to left, the dealer combines each player's hole cards with the community cards to make the best five-card hand.
a. If the player's hand beats the dealers, the Play and Ante bets win even money.
b. If the player's hand loses to the dealer, the Play, Ante and Blind bets lose.
c. When the hands tie, the Play, Ante and Blind bets push.
d. The Blind bet wins when the player wins with a straight or higher. See layout for odds.
e. If the player wins with less than a straight the Blind pushes.
f. The Trips bet wins if the player has three of a kind or better. See layout for odds.

When the dealer doesn't qualify:
14.The dealer, working from right to left, refunds each player's Ante bet. He does this before looking at any of the player's hands.
15.Then, again working right to left, resolves the action normally (see above).

Note: If the player has three of a kind or better, he always wins the trips beteven if he folds.

## IRREGULARITIES:

In the event of a shuffler malfunction, all hands are void.

## ADDITIONAL RULES:

Players may not wager on the house's hand or on other player's hands.
Side bets between players are prohibited.
Table aggregates are allowed, but must be in compliance with state regulations. At the casino's discretion, the dealers can resolve the bets in the order the casino wishes.

Operators cannot allow wagering limits to exceed the authorized limits set out in WAC 230-15-040 and WAC 230-15-140.

```
Players are limited to wagering on a maximum of four games. Card Room
operators are required to post on the layout or on a placard at the table
that players are limited to wagering on a maximum of four games.
```



|  | UTH-01 |  |  | UTH-02 |  | UTH-03 |  | UTH-04 |  |
| :--- | ---: | ---: | ---: | ---: | ---: | ---: | ---: | ---: | :---: |
| Hand | Trips Bonus | Blind | Trips Bonus | Blind | Trips Bonus | Blind | Trips Bonus | Blind |  |
| Royal flush | 50 to 1 | 500 to 1 | 50 to 1 | 500 to 1 | 50 to 1 | 500 to 1 | 50 to 1 | 500 to 1 |  |
| Straight flush | 40 to 1 | 50 to 1 | 40 to 1 | 50 to 1 | 40 to 1 | 50 to 1 | 40 to 1 | 50 to 1 |  |
| Four of a kind | 30 to 1 | 10 to 1 | 30 to 1 | 10 to 1 | 30 to 1 | 10 to 1 | 20 to 1 | 10 to 1 |  |
| Full house | 9 to 1 | 3 to 1 | 8 to 1 | 3 to 1 | 8 to 1 | 3 to 1 | 7 to 1 | 3 to 1 |  |
| Flush | 7 to 1 | 3 to 2 | 6 to 1 | 3 to 2 | 7 to 1 | 3 to 2 | 6 to 1 | 3 to 2 |  |
| Straight | 4 to 1 | 1 to 1 | 5 to 1 | 1 to 1 | 4 to 1 | 1 to 1 | 5 to 1 | 1 to 1 |  |
| Three of a kind | 3 to 1 |  | 3 to 1 |  | 3 to 1 |  | 3 to 1 |  |  |
|  | $0.90 \%$ | $0.84 \%^{*}$ | $1.90 \%$ | $0.84 \%^{*}$ | $3.50 \%$ | $0.84 \%^{*}$ | $6.18 \%$ | $0.8 \%^{*}$ |  |

* Entire game vs. dealer. Assumes perfect play.



This game will use the approved SHFL entertainment owned progressive system containing the following components and their compatible software versions: Game Manager v6.6 Build 520 or higher, Aquarius Controller v6.5.6SP, Coin Spot v6.0 and the progressive displays can be either CHAM2 $+v 1.66 P \$$ or ViPS v1.2.0 or higher

Operators cannot allow wagering limits to exceed the authorized limits set out in WAC 230-15040 and WAC 230-15-140.

## RULES OF PLAY:

1. Ultimate Texas Hold 'Em offers an optional progressive wager.
2. The bet considers the best hand possible among all the player's cards.
3. Sample paytables are listed separately
4. The top two percentage pays from the paytable require that at least one card from the player's two hole cards make up the royal flush. The Community Royal Flush is comprised only of the 5 community up-cards. All other winning hands can be comprised of any 5 cards, either all community or including the player's cards.
5. The meter will be reseeded when the $100 \%$ award hits. The cost of the reseed has been factored in to the casino's mathematical advantage.
6. To begin each round, players must make their regular game's wager. They may optionally place any bonus wagers and the progressive wager. Players must place the progressive wagers on the sensor in front of their betting position. The sensor will light up.
7. Once all players place their bets, the dealer will press "COIN IN" on the keypad. The sensors will then light up, indicating a progressive wager. The dealer will then remove all progressive bets from the table.
8. The dealer then follows house procedures for dealing the regular game.
9. The dealer reconciles the standard wager, bonus wager, and progressive wagers at the same time. It's at the sole discretion of the casino to allow, or not to allow for folded hands to qualify for progressive payouts. Follow the procedure in the next section for reconciling percentage pays from the progressive meter.
10. Progressive winners:
a. The percentage pays are paid from the progressive jackpot shown on the progressive meter.
b. Other hands are paid from the tray; they do not come off the meter.
c. In the event more than one progressive meter pay hits during the same round, the dealer will first pay the player farthest on the right and then move counter-clockwise to pay other players. As regulatory procedures permit, this policy can be replaced by casino internal controls.
d. When a player has a progressive winner, the dealer shall press the appropriate hand button on the keypad. (If the hand button is pressed by accident, pressing it again will turn it off.)
e. The dealer shall then contact a supervisor.
f. Once the casino verifies the progressive win, the supervisor shall insert the key and rotate it to "JPH" and then press "J-pot" button. This records the win onto the Game Manager. House procedures are then followed for paying the prize. (Reviewing the monitor connected to the Game Manager will show the prize amount to be paid, and pressing the "money bag" icon will print a win page, which can be used to help record the payout for accounting.)
g. Returning the supervisor key to the "Run" position will restore normal operation of the table, and adjust the meter appropriately for the prize won.
h. When the dealer reconciles all action, he presses "Game Over." This resets the system to begin the next hand.
i. Once the "J-pot" button is pressed, the prize is logged into Game Manager. If the progressive pay needs to be backed out at this point, the award will need to be manually backed out using the Game Manager manual adjustment feature.


## Progressive Paytables

Paytable for use as a standalone progressive table game or when connecting same table games

| Hand | Paytable 01* |
| :--- | ---: |
| Pays* |  |
| Royal Flush- First 5 Cards | $100 \%$ |
| Royal Flush- First 7 Cards | $5 \%$ |
| Community Royal | 3,000 for 1 |
| Straight Flush | 250 for 1 |
| 4 of a Kind | 100 for 1 |
| Full House | 10 for 1 |

* Original Wager is NOT returned

- These game rules and paytable are for use with the approved Bally Technology owned progressive systems containing the following components and their compatible software versions: (1) Nexus Command Game Manager v1.3.0 or higher, Nexus Command Table Controller Software v2.0.0 or higher and a Progressive display or (2) Nexus Command Game Manager 2 v2.5.4 or higher, Nexus Command Table Controller 2 v2.6.0 or higher and a Progressive display. The progressive display can either be provided by Bally or the operator.
- The progressive display should be a table mounted monitor with no additional intelligence or functionality, including but not limited to network capability (wired or wireless). This non-intelligent monitor can either be provided by Bally or the operator so long as it does not introduce any additional functionality.
- Operators cannot allow wagering limits to exceed the authorized limits set out in WAC 230-15-040 and WAC 230-15-140.
- Players are limited to wagering on a maximum of four games. Card room operators are required to post on the layout or on a placard at the table that players are limited to wagering on a maximum of four games.


## NEXUS COMMAND

## RULES OF PLAY:

1. Ultimate Texas Hold 'Em offers an optional progressive wager.
2. The bet considers the best hand possible among all the player's cards.
3. Sample paytables are listed separately
4. The top two percentage pays from the paytable require that at least one card from the player's two hole cards make up the royal flush. The Community Royal Flush is comprised only of the 5 community up-cards. All other winning hands can be comprised of any 5 cards, either all community or including the player's cards.
5. The meter will be reseeded when the $100 \%$ award hits. The cost of the reseed has been factored in to the casino's mathematical advantage.
6. To begin each round, players must make their regular game's wager. They may optionally place any bonus wagers and the progressive wager. Players must place the progressive wagers on the sensor in front of their betting position. The sensor will light up.
7. Once all players place their bets, the dealer will press "START GAME" on the keypad. The sensors will then light up, indicating a progressive wager. The dealer will then remove all progressive bets from the table.
8. The dealer then follows house procedures for dealing the regular game.
9. The dealer reconciles the standard wager, bonus wager, and progressive wagers at the same time. It's at the sole discretion of the casino to allow, or not to allow for folded hands to qualify for progressive payouts. Follow the procedure in the next section for reconciling percentage pays from the progressive meter.
10. Progressive winners:
a. The percentage pays are paid from the progressive jackpot shown on the progressive meter.
b. Other hands are paid from the tray; they do not come off the meter.
c. In the event more than one progressive meter pay hits during the same round, the dealer will first pay the player farthest on the right and then move counter-clockwise to pay other players. As regulatory procedures permit, this policy can be replaced by casino internal controls.
d. When a player has a progressive winner, the dealer will select the player spot corresponding to the player with the winning progressive hand. The dealer will then press the appropriate hand button on the display. (If the hand button is pressed by accident, pressing it again will turn it off.)
e. The dealer shall then contact a supervisor.
f. Once the casino verifies the progressive win, the supervisor will press the confirm button. To complete the action, a Supervisor or Executive card (depending on jackpot level) swipe is required. This records the win onto the Game Manager computer and adjusts the meter appropriately for the prize won. House procedures are then followed for paying the prize. (Reviewing the monitor connected to the Game Manager will show the prize amount to be paid, and pressing the "money bag" icon will print a win page, which can be used to help record the payout for accounting.)
g. When the dealer reconciles all action, he presses "END GAME." This resets the system to begin the next hand.
h. Once the Supervisor or Executive card (depending on jackpot level) is swiped the prize is logged into Game Manager. If the progressive pay needs to be backed out at this point, the award will need to be manually backed out using the Game Manager manual adjustment feature.


## Nexus Command

## Progressive Paytables

Paytable for use as a standalone progressive table game or when connecting same table games

| Hand | Paytable 01* |
| :--- | ---: |
| Pays* |  |
| Royal Flush- First 5 Cards | $100 \%$ |
| Royal Flush- First 7 Cards | $5 \%$ |
| Community Royal | 3,000 for 1 |
| Straight Flush | 250 for 1 |
| 4 of a Kind | 100 for 1 |
| Full House | 10 for 1 |

* Original Wager is NOT returned

- These game rules and paytable are for use with the approved Bally Technology owned progressive systems containing the following components and their compatible software versions: (1) Nexus Command Game Manager v1.3.0 or higher, Nexus Command Table Controller Software v2.0.0 or higher and a Progressive display or (2) Nexus Command Game Manager 2 v2.5.4 or higher, Nexus Command Table Controller 2 v2.6.0 or higher and a Progressive display. The progressive display can either be provided by Bally or the operator.
- The progressive display should be a table mounted monitor with no additional intelligence or functionality, including but not limited to network capability (wired or wireless). This non-intelligent monitor can either be provided by Bally or the operator so long as it does not introduce any additional functionality.
- Operators cannot allow wagering limits to exceed the authorized limits set out in WAC 230-15-040 and WAC 230-15-140.
- Players are limited to wagering on a maximum of four games. Card room operators are required to post on the layout or on a placard at the table that players are limited to wagering on a maximum of four games.


## NEXUS COMMAND MULTI GAME LINK

## RULES OF PLAY:

1. Ultimate Texas Hold 'Em offers an optional progressive wager.
2. The bet considers the best hand possible from the player's two cards, and the first 3 community cards (the flop).
3. The available paytables have been designed to work on Games with a connected jackpot in accordance with WAC 230-15-685(5) and WAC 230-15-685(6).
4. All pays from these progressive paytables only consider the first 5 cards. That is, the player's two cards, and the first 3 community cards (the flop).
5. The meter will be reseeded when the $100 \%$ award hits. The cost of the reseed has been factored in to the casino's mathematical advantage.
6. To begin each round, players must make their regular game's wager. They may optionally place any bonus wagers and the progressive wager. Players must place the progressive wagers on the sensor in front of their betting position. The sensor will light up.
7. Once all players place their bets, the dealer will press "START GAME" on the keypad. The sensors will then light up, indicating a progressive wager. The dealer will then remove all progressive bets from the table.
8. The dealer then follows house procedures for dealing the regular game.
9. The dealer reconciles the standard wager, bonus wager, and progressive wagers at the same time. It's at the sole discretion of the casino to allow, or not to allow for folded hands to qualify for progressive payouts. Follow the procedure in the next section for reconciling percentage pays from the progressive meter.
10. Progressive winners:
a. The percentage pays are paid from the progressive jackpot shown on the progressive meter.
b. Other hands are paid from the tray; they do not come off the meter.
c. In the event more than one progressive meter pay hits during the same round, the dealer will first pay the player farthest on the right and then move counterclockwise to pay other players. As regulatory procedures permit, this policy can be replaced by casino internal controls.
d. When a player has a progressive winner, the dealer will select the player spot corresponding to the player with the winning progressive hand. The dealer will then press the appropriate hand button on the display. (If the hand button is pressed by accident, pressing it again will turn it off.)
e. The dealer shall then contact a supervisor.
f. Once the casino verifies the progressive win, the supervisor will press the confirm button. To complete the action, a Supervisor or Executive card (depending on jackpot level) swipe is required. This records the win onto the Game Manager computer and adjusts the meter appropriately for the prize won. House procedures are then followed for paying the prize. (Reviewing the monitor connected to the Game Manager will show the prize amount to be paid, and pressing the "money bag" icon will print a win page, which can be used to help record the payout for accounting.)
g. When the dealer reconciles all action, he presses "END GAME." This resets the system to begin the next hand.
h. Once the Supervisor or Executive card (depending on jackpot level) is swiped the prize is logged into Game Manager. If the progressive pay needs to be backed out at this point, the award will need to be manually backed out using the Game Manager manual adjustment feature.
11. Envy Bonus:
a. A player making the progressive wager also qualifies to win an envy payout. If another player at the table hits a hand associated with an envy pay, all other players who made the progressive wager win the envy pay. The player hitting the hand receives the normal prize pay only, but does NOT receive the envy pay. Rule of thumb: You can't win an envy bonus pay from yourself, or the dealer. Envy Bonuses should only be paid to player's at the table where the qualifying hand occurred.
b. If a player's hand triggers an envy payout, the dealer will leave the hand face-up on the layout; otherwise, the dealer will lock up the cards. The dealer will then move on to the next player.
c. The dealer pays any Envy Bonuses at the end of the round. In the event that more than one player is involved in a qualifying envy pay, then all players win multiple envy payouts.


## Nexus Command Multi-Game Link <br> Progressive Paytables

Multi-Game Progressive Paytable - For use when connecting multiple 5-card poker games

| Paytable 01 | Hand |  |
| :--- | ---: | ---: |
| Pays* $^{*}$ | Envy $^{\star \star}$ |  |
| Royal Flush | $100 \%$ | $\$ 1,000$ |
| Straight Flush | $10 \%$ | $\$ 300$ |
| Four of a Kind | 300 For 1 |  |
| Full House | 50 For 1 |  |
| Flush | 40 For 1 |  |
| Straight | 30 For 1 |  |
| Three of a Kind | 9 For 1 |  |
| ${ }^{*}$ Original wager is NOT returned |  |  |
| Envy payouts are multiplied by Wager Amount |  |  |


| Paytable ML01 |  |  |
| :--- | ---: | ---: |
| Hand | Pays* $^{*}$ | Envy $^{\star \star}$ |
| Royal Flush | $100 \%$ Mega | $\$ 1,000$ |
| Straight Flush | $100 \%$ Major | $\$ 300$ |
| Four of a Kind | 300 For 1 |  |
| Full House | 50 For 1 |  |
| Flush | 40 For 1 |  |
| Straight | 30 For 1 |  |
| Three of a Kind | 9 For 1 |  |
| ${ }^{*}$ Original wager is NOT returned |  |  |
| **Envy payouts are multiplied by Wager Amount |  |  |


| Paytable ML03 |  |  |
| :---: | :---: | :---: |
| Hand | Pays* | Envy** |
| Royal Flush | 100\% Mega | \$1,000 |
| Straight Flush | 100\% Major | \$300 |
| Four of a Kind | 100\% Minor |  |
| Full House | 50 For 1 |  |
| Flush | 40 For 1 |  |
| Straight | 30 For 1 |  |
| Three of a Kind | 9 For 1 |  |
| *Original wager is NOT returned |  |  |
| **Envy payouts are multiplied by Wager Amount |  |  |

## PROGRESSIVE SYSTEMS FLEXIBILITY and RECOMMENDATIONS:

- Progressive meter contribution
- When using a pay table in which all payouts are deducted from the meter, we recommend utilizing the system to configure meter contribution rates anywhere between 0-100\%.
- Most pay tables with this style of math are designed to grow over time when a contribution rate of $70 \%$ or more is used. If less is contributed, the risk of the meter "running dry" increases.
- When using a pay table in which only the progressive (percentage) pays are deducted from the meter, we recommend only reducing the pre-configured meter contribution rate if any changes are made. Adjusting the contribution rate above the pre-configured value would reduce the mathematical house advantage of the wager.
- Reserve contribution
- We recommend contributing a small portion of each progressive wager to the reserve. This amount will be added on to any configured seed amount after a 100\% award is given, and will help reduce the drop in play expected after a jackpot hits.
- We do not recommend eliminating a seed amount entirely and using the reserve as the only seed mechanism. All games present a certain likelihood of back-to-back awards, and this method runs the risk of restarting the meter at a very low amount in that case.
- Seed amount
- We recommend using the pre-configured seed amount in the system. This amount is specific to the pay table selected for use, and is designed to offer a reasonable starting point that works with the pay table's math.
- If any changes are made, we recommend the seed amount to be at least as large as the largest "fixed" award on the pay table.
- We do not recommend configuring a $\$ 0$ seed amount.




## RULES OF PLAY:

1. This is an optional bad-beat bet for Ultimate Texas Hold'em. Players win if they and the dealer are involved in a bad beat. There are two ways to win:

- The player has three of a kind or better and loses to the dealer.
- The player beats the dealer's hand of three of a kind or better.

2. To participate in the bad beat, players must make bets on the Ante, Blind and Trips. Players place their bad-beat wagers in the marked circle.
3. If the player's hand qualifies for payouts, the dealer pays him according to the posted paytable. If the player's hand does not qualify, the dealer takes his wager and moves on to the next player.
4. If the dealer and the player have a five card tie; then the Bad Beat Bonus bet loses because neither the dealer nor the player suffered a Bad Beat.

Operators cannot allow wagering limits to exceed the authorized limits set out in WAC 230-15040 and WAC 230-15-140.

Players are limited to wagering on a maximum of four games. Card Room operators are required to post on the layout or on a placard at the table that players are limited to wagering on a maximum of four games.


|  | UTH - BBB 01 | UTH - BBB 02 | UTH - BBB 03 |  |
| :--- | ---: | ---: | ---: | :---: |
| Straight Flush | 10,000 to 1 | 7,500 to 1 | 2,500 to 1 |  |
| Quads | 500 to 1 | 500 to 1 | 500 to 1 |  |
| Full House | 40 to 1 | 50 to 1 | 50 to 1 |  |
| Flush | 25 to 1 | 30 to 1 | 30 to 1 |  |
| Straight | 20 to 1 | 20 to 1 | 20 to 1 |  |
| Trips | 9 to 1 | 9 to 1 | 9 to 1 |  |
|  |  |  |  |  |
| House edge | $20.2 \%$ | $14.6 \%$ | $16.5 \%$ |  |
| Hit frequency | $3.9 \%$ | $3.9 \%$ | $3.9 \%$ |  |




## RULES OF PLAY:

1. Ultimate Pairs Bonus is an optional bonus wager.
2. Players win if their two hole cards match one of the hands listed on the posted paytable.
*Note: Only the top payout on paytable two includes both the player's and dealer's cards. The rest of the payouts are based on the player's two cards ONLY.

To participate in the Ultimate Pairs Bonus wager, players must make their wagers prior to receiving their two card hand. Players place their Ultimate Pairs Bonus wagers in the marked area.
3. If the player's hand qualifies for payouts, the dealer pays him according to the posted paytable. If the player's hand does not qualify, the dealer takes his wager and moves on to the next player.
4. If the player folds their hand, the Ultimate Pairs Bonus wager (if played) remains in action. The dealer will remove the losing wagers and tuck the two hole cards under the Ultimate Pairs Bonus wager.

Operators cannot allow wagering limits to exceed the authorized limits set out in WAC 230-15-040 and WAC 230-15-140.

Players are limited to wagering on a maximum of four games. Card Room operators are required to post on the layout or on a placard at the table that players are limited to wagering on a maximum of four games.


| Paytables | $\mathbf{1}$ | 2 |
| :--- | :---: | :---: |
| A-A (Player) / A-A (Dealer) |  | 1000 to 1 |
| A-A | 30 to 1 | 30 to 1 |
| A-K (Suited) | 25 to 1 | 25 to 1 |
| A-Q or A-J (Suited) | 20 to 1 | 20 to 1 |
| A-K (Unsuited) | 15 to 1 | 15 to 1 |
| K-K or Q-Q or J-J (High Pairs) | 10 to 1 | 10 to 1 |
| A-Q or A-J (Unsuited) | 5 to 1 | 5 to 1 |
| 10-10 Thru 2-2 (Low Pairs) | 3 to 1 | 3 to 1 |
| House Advantage | $\mathbf{8 . 9 0 \%}$ | $\mathbf{8 . 5 4 \%}$ |


| Paytable | $\mathbf{3}$ | $\mathbf{4}$ | $\mathbf{5}$ | $\mathbf{6}$ |
| :--- | :---: | :---: | :---: | :---: |
| Ace Hearts / Ace Diamonds |  | 100 to 1 | 50 to 1 |  |
| Pair of Aces | 30 to 1 | 30 to1 | 25 to1 | 25 to 1 |
| Ace / Face Suited | 20 to 1 | 20 to 1 | 20 to 1 | 20 to 1 |
| Ace / Face | 10 to 1 | 10 to 1 | 10 to 1 | 10 to 1 |
| Pair | 5 to 1 | 4 to 1 | 5 to 1 | 5 to 1 |
| House Advantage | $4.52 \%$ | $4.68 \%$ | $4.90 \%$ | $6.79 \%$ |




