



by Allan Anderson

Tracking play and rewarding patrons playing blackjack has always been hit and miss. While slot play has become a science using slot cards and rewarding players with food, free rooms and other comps based on their play, blackjack players, especially those that bet the minimum, have not been given the comps they deserve. That is, until now.

While there are a number of systems being tested and in play, the most sophisticated system for tracking play has been developed by Eldorado, Reno and MindPlay LLC based in Bellevue, Washington. Bally Gaming is the exclusive distributor of the product. Currently the tables are in play at the Eldorado in Reno and the Las Vegas Hilton.

MP21 uses optical sensors, a patented high-speed imaging process and artificial intelligence to track each card in the deck.

Optic sensors read the edges of the chips to detect their value but no special chips are needed. Optical scanners imbedded in the chip tray maintain a record of your bet and buy-in. Each deck of cards has an a 1/100 inch bar code on the edge of each card which an optical sensor



scans as the decks are shuffled, recording the exact sequence of the cards in the shoe. Cards are read as they are dealt, chips are read as they are wagered. Optical scanning equipment imbedded in the chip tray maintains a record of chip inventory, buy-ins and chip cash-ins. Pit supervisors get exact information for ratings and managers also get real time information on which to base comps and other player rewards.

Tracking of cards as they are dealt, those remaining in the shoe and levels of wagering, makes it easier to detect card counting or to catch a theft in progress.

In casino operations, real-time information on game results and table performance is available with the click of a mouse. Table play can be monitored miles away through the internet. The system calculates the wagers by seat number. It knows what cards are in the shoe and how many decks are being used. It also keeps track of the cards that have been played.

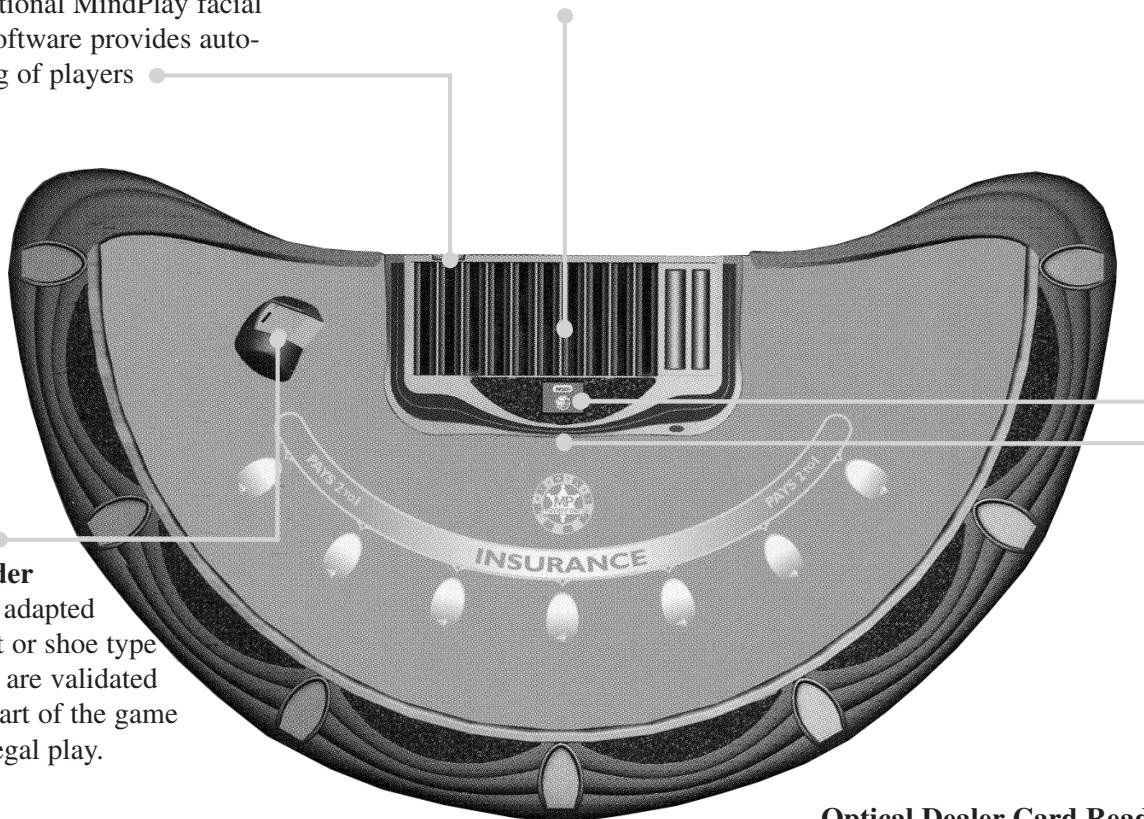
“Players are getting credit for their play instantly” says Rob Mouchou, Vice-President of Business Development at the Eldorado Hotel Casino in Reno. “We can now accurately track play even with a minimum bet better than we could before giving the player the comps they deserve”. Customer service is also vastly improved since the manual ratings are no longer being used and the pit personnel have more time to concentrate on the games.

**Player Card Reader** for identifying tracked play to individual player accounts. The Optical Card Reader features non-contact reading of playing cards. Optional MindPlay facial recognition software provides automatic tracking of players

**Chip Tray Reader** features optical reading and accounting of the chip tray inventory. MP21 reads and reconciles all transactions

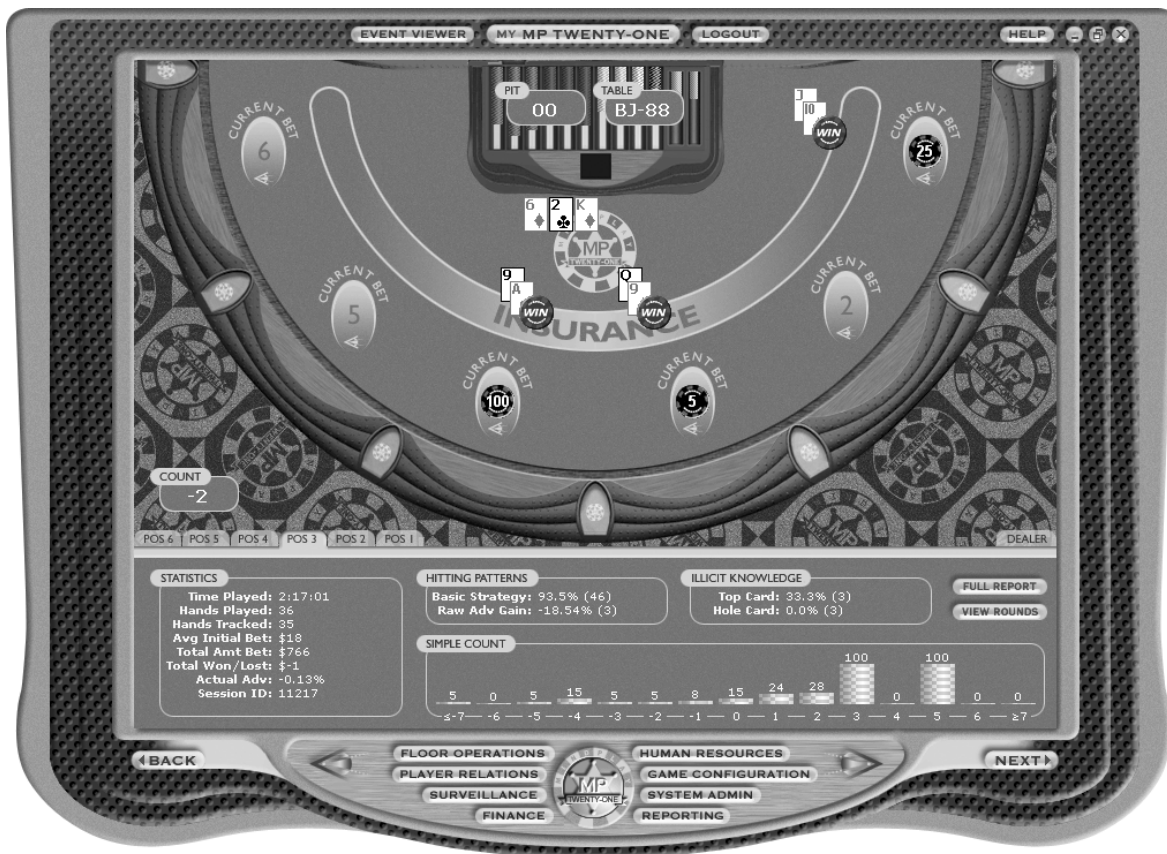
A touch screen **LCD Dealer Display** offers multifunction capabilities. Open/close tables, cash buy-ins, added security and many other features.

**Card Shoe Discard Holder**  
MP21 can be adapted for hand dealt or shoe type games. Cards are validated prior to the start of the game to prevent illegal play.



**Optical Dealer Card Reader** eliminates the need for no peak devices. Dealer card validation insures each hand is played correctly and checks for dealer hole card values to determine “21” and insurance opportunities. Sophisticated data encryption, game logic software and other security methods guarantees the game is played according to the rules.

**Card and Chip Recognition.** MindPlay has created the world’s most sophisticated image recognition technology for use in the gaming industry. Optically based, the system captures every object on the table. Totally covert and completely non-intrusive to the play of the game, chips and cards are recognized and reported to the game tracking logic of MP21. United States Playing Card Company provides the cards, using patented WinMark™ technology by MindPlay.



You can select any table in the pit and get real time information of table play. The MP21 real time table viewer generates a computer simulation of the game in progress. When a wager is placed, MP21 reports the amount, cards, hit cards, insurance, double down's or any game rule configuration and it's instantly captured, recognized and viewable through the terminal. The software can determine card counting and

basic hitting strategies. The software also lets you monitor the dealer hands per hour, table actual win percentage and table occupancy. Live video of any player position is also available.

Comprehensive historical information is permanently stored for every player visit. A player's profile can be viewed instantly.

top/hole card knowledge, and backs up the alert with digital video playback.

I'd like to thank Rob Mouchou of the Eldorado and Richard Soltys of MindPlay for providing me with the information for this article. Pictures courtesy of MindPlay.

MindPlay has engineered the most advanced security technology ever. Every transaction of the game is fully monitored and reconciled with the expected game results. MP21 alerts staff to any game violation, dealer mispays, pinching, pressing, card sequence errors, card counting,

