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# **SEGA R360** Kevin Keinert's dizzyingly fun restoration

School Arcade Day Yes, a dream come true

Future Pinball The future of pinball?



# The Future of Pinball (or the Future of Pinball Simulators?)

**P**inball Simulator. For some fans of the silver ball, these two words evoke a strong and quite negative reaction. For pinball diehards that are prepared to not take this article seriously, I plead for you to read on. There's content here that might add a little spice to your current level of pinball fandom.

### **Pinball Simulators of Old**

Since the first pinball simulations hit the bronze arcade scene in the late 70's, pinball true-bloods have scoffed at them as an embarrassing attempt at real pinball. And for the most part, I agree. I'm not prepared to present a research paper on video pinball through the digital age, but I can summarize my personal experience by saying that nothing was even close to the proper layout and aspect until Digital Illusions created *Pinball Dreams* for the Amiga computer. This software package actually encouraged me to give real pinball a second chance in the late 80's. Their tables made sense, with makeable shots, decent flow, a stereo sound package, alphanumeric displays, proper pinball rules, and better than average ball behavior for the time. Pinball Dreams had tables that felt like designer simulations for alphanumeric tables of the era. But it still was more video game and less pinball. After all, I was tapping away at a keyboard and playing a scrolling playfield on a monitor.

### MAME, PinMAME, and Visual Pinball

Beyond the late 80's, pinball managed to poke its head into the occasional console video game. Digital Illusions and similar software developers seen the surge of IBM / PC gaming interest, and followed by created a few pinball games for that growing platform. Still a favorite of mine, Microsoft Pinball featured some of the best Gottlieb pinball machines. The simulation was as good as it gets for a computer game. But the biggest impact on pinball collectors came some years back with the creation of PinMAME and Visual Pinball. For the unaware, the monster arcade emulator MAME (Multi Arcade Machine Emulator) spewed out a pinball equivalent called PinMAME. Both have the ability to run original game code (ROMs) within their emulators. An emulator simply acts like something else. With MAME and Pin-MAME, these emulators create an environment that behaves, or acts like, the original circuit boards these machines had installed from the factory. With arcade video games, the result is displayed on a monitor, like the original machine it is emulating. Input to the emulator is provided from the keyboard, or for the cabinet builder, buttons,



Above: The Visual Pinball Recreation of Bally's *Strikes and Spares* Below: The Future Pinball version, with full 3D modelling of the playfield.



spinners, trackballs, and joysticks. But with PinMAME, the ability to connect with the emulator is much more difficult to achieve. What is a pinball machines output? Is it not real physical things kicking, pop-

ping, and flipping? So PinMAME was really a neat software toy that allowed some of us to peer a bit deeper into the behavior of the solid state pinball machines we love. We saw dots on our screens that simulated the lamps blinking on and off, and actual game speech and sound from the game.

When Visual Pinball was born, it connected user created playfields (original, but dominantly re-created tables) with the PinMAME emulator. This allowed fans to design pinball tables with a number of flippers, popbumpers, ramps, and drop targets. Visual Pinball is the connection that makes PinMAME work. They sort of talk to each other, allowing people to "build" machines inside Visual Pinball that you and I have played in arcades. There are hundreds of real pinball machine titles that have been virtualized inside Visual Pinball. Each re-creation is married to the original software, playing the same music and speech to the best ability of the emulator. Its popularity and longevity continues on due to this connection.

### The Reality of it All

How real is all of this? Here you have just one opinion, so I do encourage you to see for yourself. For me, Visual Pinball is a great reference tool. We (my pinball circle of pals) more commonly use it to check the behavior of a machine under restoration, or to preview a machine that we've never played before, rather than bellying up to the keyboard for a good flipping experience. Each table is only as good is its graphics and layout artist. In other words, it's quite possible to play three different versions of a popular solid state machine, yet all of them look and play differently. Probably the more refreshing titles for me are EM tables where the table complexity is minimized and the illusion easier to pull off. Taking this as a substitution for playing real pinball is much more of a challenge. My biggest hang-up is funky ball responses where the dynamics of a ball coming off a flipper or slingshot seem far from reality. Then graphically, I struggle with the graphical manipulations used to create lighting effects, shadows, or other false realisms we all expect in a real machine. Visual Pinball had been commercialized into a machine called Ultra-Pin by Global VR. It's a fantastic pinball machine cabinet with a LCD as the playfield and another LCD taking the place of the backglass. The version of Visual Pinball they use was modified from the free one that you can download, adding improvements with ball dynamics, table view, and in-cabinet behavior. Having spent some hours playing

an Ultra-Pin, I felt that the simulation was extremely flat feeling. I wanted something more in the 3D depth department. Ultra-Pin aside, you can't beat free. You can beat the difficult install routine though, as Visual Pinball must be installed and configured along with PinMAME. See the bottom of this article for links to the goods.

### Future Pinball: Pushing the Reality Envelope

Sometime in 2006, a new pinball simulator caught my eye. It was called Future Pinball. It had everything that I liked about Visual Pinball, but taking it to the next logical level. As I mentioned before, ball dynamics and flat-looking graphics from Visual Pinball were killing my ability to suspend disbelief. But that mind-set changed as I looked over screenshots from the Future Pinball site. It blew my mind. I stopped everything and installed the program, pleased to see that I needed nothing more than the installation file and pinball tables to download and play (no ROMs!). At the time, only a few tables where available. I downloaded Sci-Fi Classic, an original creation from a trio that includes Future Pinball's creator, Chris Leathley. This real 3D environment in Future Pinball compares to Visual Pinball like a home version of Fireball does to the commercial one. I was amazed at just how beautiful everything looked, especially the lighting effects and reflections. There was only one problem. My aging PC was dying under the load that Future Pinball demands. I was sad, having found pinball simulation heaven, only to play it at 8 frames per second. This is impossible as the ball is one place, then suddenly in the drain without the player having a chance to flip. It was a serious problem since the software had me intrigued. At the least, I needed a strong 3D video card. But I decided to go all out and build a system that could handle Future Pinball.

### It Takes (PC) Guts to Play Future Pinball

In today's technical market, dual core PC's and gamer video cards are all available in cheap flavors. Many of you reading this article probably have something that will run Future Pinball well. I took on the mission with a budget in mind. A decent Acer Aspire PC for \$350 and a \$100 video card upgrade built me a system that could take on the absolute best that Future Pinball had to offer. After installing the software and copying over the Sci-Fi Classic table on this budget desktop, I flipped away at the game like I had just discovered a lost pinball prototype. Sci-Fi Classic sucked me into that virtual world of pinball with rich stereo sound, proper pinball shots, and seriously beautiful graphics running at 100+ frames per second. Immediately hungry for more, I downloaded several tables from the Future Pinball's table list, including one I had remembered a year earlier called Dead Hunters. As I played each table, I found myself smiling a certain way. I only do this when I've discovered something especially pinball cool, usually upon bringing a dead machine back to a playable state. As the night approached and my career pulled me away the next morning, I was actually thinking about how badly I wanted to get back to playing Three Angels, another Future Pinball table. This is especially strange since I have *never* had thoughts about how I wanted to rush home to play something that wasn't real pinball. It's been 4 months since this new enlightenment has hit me. I have yet to shake off the 'fun factor' of Future Pinball. As crazy as it sounds, I confess that I am magnetized to this software in a similar way to collecting and restoring machines. And it's all in the way that some of these best Future Pinball tables play.

### The Best of Future Pinball to Date

Future Pinball doesn't allow the use of original pinball code (ROMs) like Visual Pinball does. This detours many looking for a quick way to create and play Medieval Madness, or other commercially available pinball machines on their PC. There are a few solid state tables for Future Pinball, and many EM tables, all of them strikingly gorgeous and amazingly realistic. "Popette" (Jean-Pierre Renault) is the author of several Future Pinball reproductions. His work stands out as visually stunning. If you are a fan of EM and early Solid State Gottlieb tables, you owe it to yourself to explore the long list of Popette re-creations. But for me, the real gems inside Future Pinball are the pro level original tables. Blindmankind Pinball describes two guys, Richard Dadd in Spain, and Damien "Centinex" Drouart from France. Together, they have tapped into the power of Future Pinball's editor with a strong sense of pinball creativity, earning 3 of my personal top 4 best original Future Pinball tables. Dead Hunters, Three Angels, and Road Girls strongly define what modern pinball is all about. Leaving no detail unattended, the rulesets are as deep as the tables are full of eye candy. Joining the list is Polygame's (Steve Paradis) Big Spender - a game created to bring the reality of casino gambling to the playfield. It too demands



a serious look, forcing you to try your luck at its pinball casino. Trust me, you want to know more about each table.

#### Best Original Future Pinball Table: Three Angels

There aren't many pinball machines that can pull you into a story. Three Angels does with a Heaven vs. Hell story. Richard explained that he had finished Road Girls and was looking for a new idea for pinball. "I thought that the Ghostbuster license could be a very nice one for a pinball. So a weekend I rented the two movies I took my pinball scrapbook and watch those movies. I remember hitting pause and writing down some ideas. When the movies finished I wanted ghost, a trap to catch those ghosts and a team to fight against them. After working a little bit more on the idea, I left out the Ghostbusters theme because I wanted something darker and having more of a good vs. evil element. I came out with the idea of a Ghost Hunter (that was one of the preliminary names that I used for the game), finally it became Three Angels." The sounds, speech, and dark atmosphere of the playfield graphics suck you into a supernatural horror movie. Each ball you shoot is an angel, brought into the world to do battle against demons. A priestly voice introduces each ball to the shooter, then howling beasts, screams, chains, and gates opening and closing bring continue the sonic side of the

story. As Richard told me, "We wanted to get the players inside the game." "We wanted the history to be a very important element of the game, not just a excuse for an art package and music. We always worked with that idea on mind, trying to bring a more immersive atmosphere to the game." And you can tell right away. The game has a unique skill shot and a tight lower playfield that features 3 locking gates. There are ramps and a ball transporter that send action up to the upper playfield. Speaking of which, it's almost completely divided into two separate halves with a captive ball area in between. When a demon is set loose, another ball enters play. Lose the ball and you've allowed a demon to escape. Capture a ball into one of the gates and you're one step closer to ending evil forever. While this is great, Blinkmankind is making it better. They're currently finishing up on a major update to the rules and some playfield tweaks. Richard explained what we can expect around the corner. "Our main objective is making the gameplay much easier to understand for players without losing anything of the original darkness and "hellish felling" of the original one. We want to improve the game experience, making the game much more fun and much more darker pushing the history line to the limit. Every element of the game has been reworked, from the blood extractor machine, to the captive ball of the upper playfield. The playfield art has been improved a bit, 95% of the DMD animation is new and there are a lot of new FX and a nice new soundtrack. And it would include a small detail that I think it would improve the gameplay a lot." Talk about commitment!

### Second "Can't Miss This" Table: Dead Hunters

Dead Hunters has a feature that you just can't pull off in real pinball. There's a matrix of drop targets in the lower center of the playfield that will remind you of Space Invaders during gameplay. Starting up a game starts a menu of modes to select from. You must play and beat all four modes before moving on to the locked mode and final wizard modes. The previously mentioned matrix in the center of the playfield is where various baddies are spewed out to attack you. Depending upon which mode you are in, the number, speed, and location of which these guys flow down will vary. While this may sound like a gimmick, I challenge you to give it a whirl. The matrix behaves like drop targets, with the ability to strike them from behind as well as in front. To pull this off, Richard and Centinex spent a ton of time working the scripts and re-positioning flippers to get the shots to work. The result is a well balanced feature within a traditional tablet that works well. Beyond this feature, there is a low powered popbumper (Nuclear Reactor) surrounded by a spinning wheel (think Whirlwind), and various kickout holes to lock balls. It causes the ball to be thrown back into the nuclear reactor again and again, driving up the pressure of the impending nuclear disaster. Speech and sound bites from the table's hero's (Sam Thorne and Linda War) will remind old school PC gamers of Duke Nukem 3D & Serious Sam. Indeed, you feel like you're playing a testosterone pumped Duke Nukem pinball machine with all the alien scum and weaponry you would expect from a game like that. As Richard put it, "The voices for Sam came from the game Serious Sam. We decided to name it Sam too in honor of the original one. Thorne is a variation from our tech engineer's surname." You have to steer these two to victory over the undead. Completing a mission is a dramatic affair with one of the best end-of-mode score summaries ever in pinball! Lighting on this game dares your to compare it to anything made virtually and otherwise. Why integrate character recognition? "I think they're great and a fundamental part of the game. They fit perfect inside the game, adding some depth to the whole playing experience, something



like Rudy in *Funhouse*, or Red & Ted in WMS's *RoadShow*."

### Third "Can't Miss This" Table: Big Spender

Steve (Polygame) is a professional motion artist and game developer from Canada. After being pulled towards the silverball by his wife, Steve started his pinball simulation journey with Visual Pinball. Dismayed with the flat plane result from the VP software, he looked into Future Pinball. Once his system was tweaked, he dove into making a game that reflects the Paradis' family's interest in the casino theme. You can see it immediately by looking over Big Spender. The theme includes a strong injection of video slot machine bling. Steve comments, "I like designing video slots, but when I play, it is not to win money especially. It is more to get to the mini-game." Looking across the playfield, you immediately connect with the adult theme park of card games, roulette, craps, and other casino games. In this game, you try to win big dollars by navigating your ball to different games. The table plays easily with the only way to drain being between the flippers. But don't take this game too lightly. Your ability to score big requires the same amount of luck required to win at a casino. And similar to real life, the bank *always* wins in the end.

Taking a creative step, Steve programmed Big Spender to let you play until you lose 3 balls, or until the bank earns \$1 million. You have to plan your shots, otherwise you risk losing your earnings and helping the bank hit the \$1 million mark quicker. I asked Steve to comment on this different direction. "I just wanted to have a new turn on the genre. I like working with odd components to give

a sensation of stress. If you play a couple of times, you will start to feel that Big Spender is really inhabited by a greedy banker who only wants you not to succeed." The casino audio atmosphere is right on with convincing speech injected to each mini-game. As with the others, everything is beautifully done causing you to inherently stoop down and attempt to look deeper inside the playfield. Steve uses a lot of visual feedback through a small center playfield display. It provides quick information without the player moving their eyes too far away from the action. I should also mention that Steve is looking for someone willing to assist with coding his upcoming Future Pinball table creations. Interested parties (and fans of the table) should contact him at info@steveparadis.com.

#### Fourth "Can't Miss This" Table: Road Girls

What male pinball fan doesn't appreciate pretty girls spread across a pinball art package? Add a hot rod truck, cops, and a dose of country music and you have Road Girls. This table, Blindmankind's first public release, has one heck of a theme that will have young and old men struggling to keep their eyes from popping out of their heads. Richard says, "No one knew me, so I think that I could get some attention from the pinball community if I used some beautiful and voluptuous women. I didn't want them to be nude, just some curves and nice faces. I always love The Cannonball Run movies and everything related to trucks, route 66, and the deep South. In fact one of the initial names for RG was The Black Truck. I thought that would be a nice and very "classic" theme for a first pinball game: girls, trucks, policemen, a

sheriff and a lot of miles." They integrated all of these elements into a well rounded game that will have you picking up "Road Girls" as part of the mission, while steering away from the police.

Speaking of the Road Girls, "The girls on RG are from Mrs. Jessica Dougherty and Mr. Carlos Cartagena. I've been lucky of working with Mr. Cartagena and I must say that he is a truly artist, a great professional, and a very kind man. His work has been recognized as brilliant, so I felt honored of having his girls on RG." There's a lot more to accomplish in each mode, but I'll leave you to try and figure it out. I personally have a hard time getting past all the playfield eye candy.

### **Rob's Favorite Recreated Tables**

This article is surely pressing the limits of our fearless editor's patience. So I'll just list these 'Gotta Play' re-created commercial tables. In no particular order, my top 5 are:

Gottlieb Queen of Diamonds Gottlieb Fast Draw Bally Centaur Bally Eight Ball Classic Bally Fathom There's many more, but these are the most

played at my house right now.

# How would Future Pinball do in a real pinball cabinet?

I had the uncontrollable urge to build my own Ultra-Pin, except ditching Visual Pinball for Future Pinball. In looking for others who had made the journey, I stumbled upon Polygame (Steve) from Canada (see Big Spender above) and Jon from the UK. Soon, I was collaborating with several folks around the globe. We all eventually built our

own custom Future Pinball cabinets with great success. Next month, I'll share a little on their projects, and show you in detail how I built my Future Pinball cabinet, Mini-Pin. Ironically, while all of this work was in progress, Future Pinball's creator Chris Leathley, entered into an agreement with Nanotech Inc. along with Blindmankind Pinball and Polygame to eventually bring you a commercial product called Multi-Pin. While these press releases are still warm from the printer, I can share this much. It will be similar to Global VR's Ultra-Pin, but feature the Future Pinball foundation along with the original tables I selected for this article (good taste on the table selection committee's part!). For commercial purposes, I think this will result in a better chance of success for their product as newbies will be initially drawn to the table by its eye-catching graphics, while pinball players will be willing to spend time learning new professional level tables with all the different modes of play they offer. The product isn't marketed towards us handymen (and women) who like to dig into the woodshop and DIY. And the Future Pinball author actually gives us his support and kudos on our creations (see the interview on this page). So tune in next month as we explore a project that has been a ton of fun to build, and gained serious interest by everyone that walks by it. If you happen to be at The Heartland Supershow (Sept. 19th & 20th), you'll get a chance to play it in person! GR

For those wanting more on the designers of Three Angels, Dead Hunters, Big Spender, and Road Girls: I managed to get great interviews from these guys, and have more details to share from their designer perspective, including stories on how they initially found an interest in pinball. If you want to know more, drop me a line at popbumper@gmail.com. If enough people bug me about it, I'll at least drop a side article on 'the rest of the story'.

**Future Pinball** www.futurepinball.com (Future Pinball Install files, tables, links to table sites, forums, etc)

**VP Forums** www.vpforums.com (Visual Pinball installs, tables, and discussion - requires you to create an account)

**IR Pinball** http://irpinball.ztnet.com (Future and VP tables, Visual Pinball Install)

Nanotech's Commercial Multipin www.nanotechent.com/multipin.php

Blindmankind Pinball http://www.pinballhispano.net/blindmankind/

Steve Paradis / Polygame personal website www.steveparadis.com

# One on One with Chris (Black) Leathley, The Creator of Future Pinball

wanted to know just what possesses a person to pour countless hours into making such a complex mechanism as Future Pinball. If you know anything about programming, you have to stand in awe of this application. I originally had intentions of dropping pieces of this interview into the *Tales of the Silverball* column. But after reading it over, decided it is best to let it stand on its own legs. So without any further delay, I give you the Australian pinball simulator mad scientist, Chris Leathley.

#### Give me a little background on your pinball interests ...

My Interest in Pinball stems from being a technician in the late 80's for an amusement chain called TimeZone and for Leisure and Allied Industries which was the major importer of pinballs in Australia. I used to love setting them up, brand new out of the box, and maintaining them on site. (When cleaning Black Knight 2000 I would put it into sound test and listen to the theme music.) My friends where always much better players than me, and used to come to work to play the latest Williams Prototypes. I remember once playing a early Earthshaker (which had the building which went up and down) and getting the ball stuck on the building and watching it hit the glass each time the machine raised and lowered the building while in ball search mode. As for collections, I have a Williams Space Station at home and have added a Williams Whirlwind and Bally Fireball. Ironically both having the same Whirlwind Spinner mechanism. My Dream machine would be a mint condition Black Knight 2000. But given that pinball machines are starting to get rare in Australia, I don't see that happening much.

What was your motivation in getting involved with Visual Pinball (VP) originally? I first saw Visual Pinball in 2000 and immediately wanted to do Black Knight 2000 for it. That involved writing a lot of code to control the displays, music, lighting, etc., which I felt should of been in the main program as it would of been easier for other people to do the same. I contacted Randy Davis (the original developer) explaining what I would like to add to the program, and he allowed me into the team. For a while we both had a bit of fun developing new features for VP.

# Why did you switch from Visual Pinball to Future Pinball?

Mainly due to frustration. Randy Davis tended to vanish for months at a time, so I was doing all this work, wanting it to get released and having to wait more months for Randy to get back into Pinball enough to want to release another version. I was also getting tired of the bickering at the pinball forums. After leaving VP, I worked on a Jumpman game with Randy Glover which was a favorite game of mine on the Commodore 64. After a few years (2004) I got itchy for pinball again and thought about writing my own pinball construction program. I quickly modeled up a bumper, put it on a playfield graphic, and flew around it in 3D. At that point I knew what I wanted to do.

# What excites you the most about the Future Pinball engine?

It's very dynamic. Being able to design your own tables and being able to view them from any sort of angle is really cool. Unlike Visual Pinball which draws the playfield only once and animates static images, Future Pinball draws the table on every frame, which allows for far better visual effects (translucent plastics, better lighting, reflections, ball mirrors etc..). And because it takes advantages of modern day hardware, it is far more expandable to add in new features such as real time shadowing, better reflections etc.

#### I've downloaded the Newton Game Dynamics "Newton Playground" and found it literally hours of fun with good detail. How did you find this engine and integrate it into Future Pinball?

I was looking for a good physics library which was cheap (or free) and would allow me to do some of the demanding things a pinball simulation requires. Most other physics libraries focus on getting things done very quickly, and as such, take a lot of short cuts (i.e., it only has to look right). As pinball is based on the outcome of that (i.e., a ball hitting a wall has to behave the same way each time), it was more important to find an engine that provided a proper simulation as opposed to an approximate simulation. Newton fitted that bill quite well and it integrated quite easily with my engine. It's not perfect, but I'm reasonably happy with it.

#### When considering the editor, how important was it to have someone (Martin Antholzner) create models of pinball parts for FP?

Martin has helped immensely with high quality models to make Future Pinball look as good as it does. We have over 1000 modeled components based on real pinball parts, which Martin has worked on over the years. Having somebody on the team who loves pinball that much was a true godsend. In the early days, we took lots of measurements of the parts we had and Martin has been steadily buying more components to make the models we do have even more accurate.



### How is the editing approach different than VP?

Well, obviously they both are designed to allow the user to create pinball tables. One of the things that was annoying about Visual Pinball was that to make a reasonably looking table took a lot of time and a fair bit of patience. If you wanted something as simple as a peg, then you had to shape one out of walls. If you wanted it to actually look like a peg, then that took even more time to do with all the layers. One of the things I really wanted with Future Pinball was to take all of the pain out of laying out a table. Things were designed to allow for standard components to be placed down. As we have quite a large selection of models, this makes things so much easier for the end user.

**Everyone that has ever tried FP with a** powerful 3D card surely enjoyed the realistic pinball simulator experience that FP delivers. Yet the average PC struggles to run FP at the medium graphical settings. How might you advise users in order for them to get the best experience with FP? When developing FP, we aimed at decent game play on what was a mid-range card at the time (an nVidia Geforce 6600GT), which are now old and cheap. If their machines struggle a little, then use the minimal settings. At the end of the day, Future Pinball is a modern 3D application, and much like most games these days requires a semidecent machine to play.

We do try to keep things optimized as much as possible though. For example, each on screen component is usually made up out 3 to 5 individual models which are used to make up the final render. Obviously the total polygon count (a polygon is lowest level element a video card renders with and most objects in Future Pinball will have 300-2000 polygons each) is very important to keep the game running at a decent speed.

So we break up the models to do specific purposes. For example, the flipper you see on the top of the playfield doesn't have a base to reduce the number of polygons needed to be drawn. But that means we can't use it to draw the reflection using this model, which has to draw the flipper upside down (as if reflected). That would have a hole in the reflection. Also the FP logo on the flippers isn't seen, so it's a waste of time to draw it. So we use a second model which has the base, but doesn't have the top. It may seem like a lot of work, but it can save having to draw several hundred polygons. If multiplied by the number of components on the table, it adds up to quite a lot.

Knowing that you've poured a large amount of time into FP, how satisfying is it to see the creative minds of future pinball table designers? What else do you find satisfying about this project?

I love looking at the work that people put into their creations. Obviously everybody has different levels of skill, but it's nice seeing the little tricks that people come up with, and the amount of detail they put into their games, like all the various screws and bolts which don't actually do anything, but just give the table that professional look. I've always been big into game creators and enjoy making something that other people can use.

### What are some of your favorite FP table creations and why?

That's probably quite a hard one as there have been (and still are) guite a lot of good table authors for Future Pinball. The obvious stand outs are Richard/Centinex (Blindmankind Pinball) for their gorgeous graphics and deep game play. 3 Angels would have to be favorite of their tables as it reminds me a lot of the Black Knight 2000 theme with its dark overtones and rich lighting. Pinwizkid has done some very nice tables, and his new Blue vs Pink table is looking awesome. Steve Paradis' Big Spender is also at the top of my list with all the toys on the table and the overall look. This isn't to discount the total dedication that people like Popotte (Jean-Pierre Renault), Greywolf, and Leo have done at recreating the old classics with newly redrawn playfields and plastics. I try to play every table that comes out, and most of the time there is always something that surprises me.

#### Looking at recent press releases in the coin-op industry, it appears that you have come into a commercial agreement with Nanotech for them to produce a commercial product (MultiPin) featuring FP and several key tables. How are the commercial FP and the freely downloadable versions different?

Well the commercial version is standalone (i.e., it doesn't have the editor) and has support for the various new video modes, as well as extra functionality to suit the coin-op environment (coin, replays, analog controls). It also allows for competition modes as well as integrates into their front end / table launcher for live updates, configuration etc. Apart from that, most of the changes I've made (dual screen, command line tweaks etc.) are already in the downloadable version.

#### Will the commercialization of FP change the future of the FP software that we've come to know from you?

Not really. They have their version and I have mine. I have access to their changes and can freely implement them if I wish. I have my own plans on where I want Future Pinball to head in the future.

#### Who (demographically) is Nanotech targeting the MultiPin product to?

There are two target markets for MultiPin. One is the traditional arcade space. Many pubs and similar facilities only have room for a single Pinball machine. Having a multigame machine that is able to cycle through multiple tables, and upgrading new tables is a huge bonus. The team has a lot of experience with many of them from UltraCade Technologies, the most successful multigame classic arcade machine. The mix of new original tables and classic recreations provides something for everybody in the coin-op environment.

The other market is the home game room market, which is very big in the United States. Again, people often have room for one or two machines in their game room, and having a multi-game pinball machine is a very desirable option.

# How do you think MultiPin will compete with UltraPin (historically)?

Since UltraPin is no longer being manufactured, there isn't much to compete with. UltraPin only ever had the 15 tables made available for it and no upgrades were ever released. The MSRP price is also not a big deal since that is merely the "suggested" retail price. Many outlets will have substantial discounts from the MSRP.

There are a few of us out there that have mustered the energy, passion, and drive to build our own cabinets. You've been very positive and encouraging to us on the forum. Considering the upcoming MultiPin product, how do you feel about people making their own cabinets? We don't see the hobbyist as a conflict to the MultiPin product. Those people that are willing to put the time and effort into building their own product most likely are not going to buy a turnkey solution. The online forum hobbyists that like to "Do it Yourself" are great, and a huge part of the pinball market. but don't really fall into the target demographic for the MultiPin machine.

Thanks, Chris for the good discussion, and best of luck with the MultiPin endeavor. Keep the creative juices flowing with Future Pinball!