

## Visible Pinball Machine

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Now you see it... now you don't. The Visible Pinball Machine is a feast for the senses, not only can you see whats happening above the playfield but now you can also see the mechanics below deck as they work their magic.

I managed to pin down Michael Schiess from Lucky Ju Ju , (the brain behind this pinball art piece) for a quick interview. Read what he has to say at the link below.

Why build a transparent pinball Machine? I teach classes on EM Pinball repair and I build science exhibits for a living. I have developed the Science of Pinball series of exhibits as a way to earn money for the museum effort and to have these exhibits in our museum. The Visible Pinball is the centerpeice of the exhibition. It is an invaluable tool for showing the inner workings of an EM pinball in operation.

Who is team behind the project and what backgrounds do each of you have? Michael Schiess; Artist, musician, inventor. Day job; Landlord, Museum Technician.

Wade Krause; Artist, musician, graphic artist, pinball back glass and playfield reproduction. Pinball restorer, and silk screen specialist. Day Job; Screen Printing

Christian Schiess: Artist, inventor, Neon instructor, Exhibit builder, brother.

Nathaniel Taylor: Artist, Electronic Tech, Machinist.

Dick Falkard; Designer, Woodnologist, Builder, and CAD/Draftsperson.

Dave Foster; Programmer, Graphic Artist.

Whose idea was this project and when did the idea originate? I Conceived it in 2005.

How long has the project taken to get to this stage and when is it expected to be completed? It is finished: approx 1 year

Was there a particular reason you chose Gottlieb's Surf Champ as the basis for this project? It had to be an Electromechanical Pinball as a solid state machine would be fairly boring in comparison. Surf Champ has the largest variety of different playfield components; Bumpers, Spinner, Drop Targets, Slingshots, Kickout Hole, Rollover lanes, Star Rollovers and of course, Flippers. Add to that, the Bonus, Double and Triple Bonus, Extra Ball and Special made it a game packed with just about everything. It also had fairly tame artwork which would be acceptable anywhere. The final reason, it is a challenging game that will keep even the avid player entertained.

Why did you choose an electro-mechanical machine rather than solid state? As noted above, a SS machine would not be as engaging. The next machine will be a SS to be used to show the difference between the two and the evolution of pinball.

What materials have you used and what have been the benefits and pitfalls of those materials? Stainless Steel Fasteners.

Plastics of various types.

It is definitely harder to build a cabinet and playfield out of plexiglass and it weighs considerably more. It is slightly more fragile and susceptible to scratches.

The playfield is smoother and the play is considerably faster. Oh, and its Clear, so you can see through it!

What specialised tools were used? CNC Router, digitizing tool, large format silk screening.

Could you briefly describe the process involved in the creation of the table? Wade Krause was instrumental in creating the Vis Pin. He digitized the playfield dimensions, hole/screw pattern front and back, and scanned the artwork in order to generate the film to produce the screen for printing. He also performed the same tasks for the head and back glass. In addition, he scanned the playfield plastic sheilds and reproduced them as black outline plastics.

Dick Falkard assisted with drawing the cabinet and inputting it into CAD.

Christian Schiess helped assemble the cabinet, drilling, tapping and hand fitting the peices.

The playfield, along with the inserts, was routed at Radio Robot by Nathaniel Taylor.

The Cabinet was routed at Mr Plastics in San Leandro, CA with program tweaking by Dave Foster.

I oversaw and all phases and was the primary builder.

What has been the most difficult step in the production?The handfitting of the lockdown bar.

What has been the approx cost of the project to date and do you see there being many further costs?The total cost, parts and labor is roughly \$19,000.

Is there anything you could have done in hindsight to make the project easier on the wallet? No, I did it as inexpensively as possible.

Will the final playfield show a transparent version of the playfield graphics? If not, have you considered doing this?It is the black outline of the original artwork.

Will you use any additional lighting to light the lower sections of the table that are now visible or is the existing lighting sufficient?The Argon/phosphor tube

What has been your favourite part of the project so far?Seeing the expression on peoples faces when they study it.

Any plans to create another Visible Pinball Machine based on a different table?I'm already doing it.

Do you think the project will help to renew interest in pinball?Everything I do is an attempt to revive/enjoy pinball.

Do you know of any similar projects underway or previously completed?No

Has there been much interest in the table?A lot of buzz on the web and added attendance at our Pacific Pinball Exposition.

Will you be placing the table on public display and if so, where can we see it?Plans are in the works.

Do you have any final words of wisdom for those considering creating their own Visible Pinball table projects.I consider it an artpiece and therefore, intellectual property. I don't care if someone wants to build their own for personal use, but I intend to sell or lease these to make a living and fund the Pinball Museum I am trying to build. I would appreciate it if people respected that and didn't make me fight for my bread and butter.

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