Consoles
Bringing the arcade home for 35 years

Tales of the Silverball

FREE PLAY.

A Digital Juke – Cheap!

*R*ob's Jukebox Arcade…Well, that's what the marquee says, anyway. It's not much of an arcade machine, but I never intended it to be one. I was inspired by Brien King's article in the April, 2008 issue of GameRoom magazine. I read his story on how he created the Robojuke – a custom full-throttle digital MP3 jukebox. I had been kicking the idea around for about 2 years, and his article really motivated me to get moving. If you've read my article on MiniMAME (April 2009), this little juke was the inspiration for it.

I had an old mini-cabinet (cabaret) that used to house the obscure "Magical Touch" touch screen game. It was inserted into a bulk deal I had made 6 years ago. And while all the other pieces found their way to new homes, or reconditioned for my home, this single piece stayed in the corner collecting dust. Before I moved it into the shop, I had to build a 'proof of concept' model – something that I knew would satisfy me.

I dug around in my own inventory for several fundamental items like a motherboard, computer power supply, hard drives, and everything else you need to build a PC. I connected cables and spread out the un-cased PC across my shop countertop. I installed a light version of Windows XP and began to download various MP3 jukebox applications to test drive on it. All the while, I had made up my mind to be cheap. I would have to re-purpose as much existing junk as possible.

After trying many MP3 Jukebox applications, including Brien's pick (Virtual Music Jukebox), I settled on Party Time Jukebox. This is an album based application like Virtual Music Jukebox, but the interface seemed to be more attractive and intuitive for my specific tastes. So far, I was out $0 using existing PC parts. I brought the old Magic Touch

cabinet into the shop and started removing everything – monitor, original game circuit boards, marquee, and power supply. The cabinet was built perfectly for a PC motherboard. But I had a couple of issues to think my way through. How big of an LCD could I use and how would I mount it? What about PC speakers? How would I control it?

Again, being on the cheap, I took a mental note of the things I needed (LCD monitor, speakers, control interface) and started looking for clearance items or junk from friends to fit the bill. At the time, Office Depot had a sale priced 19" standard aspect LCD monitor at $150. I could drill 4 holes in the back of a 1" x 6" piece of lumber (shop stock) and mount it to the back of the LCD, then screw

that to the cabinet. Two days later, I found a set of clearance PC Speakers (Phillips PC400 100 Watt) with 2 satellites & a powered subwoofer that had been $60, marked down to $20. I managed to mount the satellites on the sides of the cabinet and route the wires to the subwoofer that fit nicely behind the LCD inside the cabinet. So far, I'm out $170. Party Time Jukebox can be used with a real touch screen monitor, but the cost of those would blow my budget to pieces. What I really needed was a laptop style touchpad to navigate the pointer instead. And a short Google search later presented touch pad products from Adesso. Buy.com had one for $33, shipped! Once it arrived, I drilled a hole on the right side of the cabinet and routed

the USB wire to the motherboard. With Velcro, I mounted the touchpad right next to the natural resting position of a "player's" hand. In practice, it was easy to learn and felt quite comfortable. I'm up to $203 now with everything working and sounding perfectly. But no marquee or bezel.
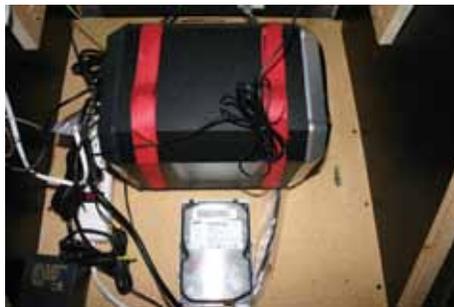
In my shop of coin-op horrors was pile of odd cut Plexiglas which led me to a solution for the bezel. Cutting the Plexi to size, I masked off an area and sprayed silver hammered metal paint on the back side. Then I added adhesive door foam strips around the edges area to make it look a bit more professional. Lastly, I found the perfect marquee at mamemarquees.com saving me from the time intensive process of designing my own. A mini version of "Jukebox Arcade" was ordered for $30 (shipped), in a very small custom size. It can be a wait for custom sized marquees so I pondered how I could add a little arcade functionally.

I loaded up an old archive of MAME 0.53 that contained most game images, and tried to figure out just how I might enjoy it, or any other emulator for that matter, with an Adesso touchpad. It's a no go with the pointing device... just too many other buttons needed. But no worry. Since I'm on the cheap, I used the little hideaway storage compartment beneath the coin door to feed a keyboard and network cable. The Pentium 3 processor handles the old MAME version with ease, and I got lost for several nights playing the classic video games of old on my jukebox.

Finally, the marquee arrived. And with a $6 fluorescent lamp fixture and 2 more pieces of thin plexi cut to size at my local True Value hardware store ($2), I now have a slightly professional looking jukebox to share when I'm entertaining friends, and to crank up loud when I'm working in the shop. If I mount some wheels to the bottom, the thing would be portable enough to place on the backyard deck during a barbeque.

So compared to Brien's, I don't have the jamming power you could achieve from quality car audio. His box is surely smokin' loud with better audio tonality. My cabinet looks a bit plain, with only a marquee to give it an identity. And I only have one way to control my interface, via the Adesso touchpad. So Brien's is really a work of art.

But with those shortcomings on my juke come big savings. And there's still a bit of creativity left if I want to build a MAME style control panel to attach to the jukebox. But for now, I'll settle for a digital jukebox on the cheap! **GR**

Cost sheet at the time of construction (late 2008):

- Cabinet – Obtained in the mix of an arcade buyout – $0
- PC Hardware (Pentium 3 motherboard with 256M RAM) – Old stock - $0
- 2 Hard Drives (1 for the OS, 1 for my MP3 and MAME collection) – Old stock - $0
- 19" Standard LCD Display - $150 + tax
- Keyboard – Old stock - $0
- Adesso Touchpad - $33 including shipping
- "Jukebox Arcade" marquee from mamemarquees.com - $30 shipped
- Phillips PC400 100 Watt Speakers - $20 + tax, Clearance at Target
- Party Time Jukebox Registration - $25
- Fluorescent Lamp - $6 + Tax
- Plexiglas for bezel and marquee - $2

Total – Approx $268.00 (add tax, where applicable)