

A Little Electronic Organ Presidential History

As it was for so many of us, getting introduced to organ music involved electronic organs long before their pipe-induced counterparts.

It was 1961 when my parents bought a Lowrey Holiday spinet organ, and I began lessons with little thought of theatre organ or anything else musically for that matter. Even at that age...all of eight years old....I had sports casting, not theatre organ, on my mind.

The Lowrey gave way to a Thomas organ, one of those with spinet keyboards but 25 pedal notes.

And by the time I left for Indianapolis and Butler University, I had been introduced to the Pickwick Theatre Wurlitzer organ, and enjoyed almost a year of lessons with the legendary Al Melgard. While at Butler, I met Tim Needler who had a large Conn Artist model 720 in his living room, a wonderful big sounding organ that had an interesting added "gimmick." Tim had found a small glockenspiel and smartly hooked it up to the top end of the accompaniment keyboard, allowing for "fillers" to be played almost like a third keyboard. The organ had two 61-note keyboards, a 32-note pedal board, and a built-in Leslie speaker that allowed the very straight looking console to play a very theatrical sound.

While home during a Thanksgiving break, I had enjoyed a short practice stint at the Pickwick Theatre, and before I headed home, I strolled past the local Lowrey music store, and what should I spy on the showroom floor but a beautiful Conn 720. I walked into the store and sat down, played the organ for a while, and it was almost perfect. I found out later that all of the contact bars had been replaced.

I noticed no price tag on the organ; asked the girl behind the counter what the price was; she had to phone the store owner. He got on the phone - I was anticipating a price tag of something like \$1200 - \$1500 - and imagine my surprise when he quoted \$750. I almost fell over, and told him to do NOTHING with that organ, I would be in the next day.

Back home, I told Mom and Dad of this fabulous instrument at a great price, and of course, I just had to have it. Dad called a friend of his who played the organ a bit, and he bought our Thomas organ for \$500. So, for \$250 out of pocket, the big Conn got delivered, leaving my poor mother somewhat bewildered as to just where to fit the relatively enormous console into the living room of our apartment in suburban Chicago.

That Conn eventually followed me to Marion, IN; Lafayette, IN; Indianapolis, IN; and before I moved to Atlanta in 1992, I knew it was time to sell the old Conn and stop hauling it around the country.

I learned an awful lot of music on that great organ. I even eventually found a glockenspiel to hook up to the top end of the accompaniment keyboard, just like the very first Conn 720 I ever played.

Ken Double

We Want To Know!

I own a Rodgers model 333 organ. I am looking for recorded music played on this instrument. I am also looking for a Rhythm unit for this instrument. Please contact me if you can help.....

Roger Leir

leiprivate@aol.com

The Special Corner !

R. B. Coulter's Special Project

Fig. 1



Do-It-Yourself Theatre Organ

I have wanted a theatre organ for many years. I am not an organist, so I hoped to use the organ for practice so I might strive to some level of organ musicianship. I also have always enjoyed building electronic projects and kits. So, I knew that I would enjoy building my own theatre organ. Unfortunately, by the time I had the money and time to build an organ kit such as manufactured by Schober, Devtronix, Artisan, etc., these businesses were either out of business or no longer made organ kits. However, technology has come to the rescue with the development of digital computer and electronic technologies that have replaced older methods of designing and building electronic theatre organs.

The organ industry has embraced these new technologies and a new Virtual Theatre Pipe Organ (VTPO) industry has evolved. Thus, products for building digital organs are now readily available for the do-it-yourselfer. These products consist of completed electronic cards that a builder wires to the console components to create a digital console. Thus, the electronics skill level of a person desiring to build or rebuild an organ is minimized. Additionally, I found that these components were reasonably economical to purchase so I decided that I should build my own digital theatre organ.

One can build a new organ from the ground up or rebuild an existing theatre organ. I was fortunate to find the 30 year-old, three manual, single bolster, Rodgers Olympic organ shown in Figure 1. In these articles I plan to describe my experience in rebuilding this Rodgers Olympic theatre organ. I will be describing my project organ and the products used in it and their application. There are other viable products in the market place that can perform the same functions; however, these articles will not include a survey of these other products.

Planning The Project

Initially I had some idea of the theatre organ that I wanted. I thought that a three manual, 16 to 17

rank organ of modern design would meet my needs. Working with this assumption, I developed the following list of the major tasks needed to complete my organ:

- 1) Develop specifications for the completed theatre organ
- 2) Define and make console repairs and upgrades
- 3) Determine, procure, and install the electronic components required to digitize the console
- 4) Define, procure, and install the digital sound engine requirements
- 5) Define, procure, build and install audio systems (amplifiers, processors, and speakers)

This article will cover the first two tasks. The last three tasks will be covered in subsequent articles.

Developing The Specifications

I found that developing the new specifications for my theatre organ was the most difficult and time-consuming part of the project. I had to partially credit this difficulty to my lack of theatre organ experience and knowledge of theatre pipe organ design. Additionally I did not have a clear idea as to what my new theatre organ should be capable of. The fact that there are so many choices available and the fact that digital theatre organ voices are plentiful and economical really complicated the specifying tasks. I had to go through an extensive learning curve before I was able to complete the specifications. Ultimately, an experienced theatre organ musician, builder and friend provided much needed advice.

I now think it important for a theatre organ builder to develop some clear idea as to what their theatre organ should be. I am not sure how I came up with this idea, but I decided I would try to build an organ that could match ninety percent of the registrations published in Walt Stroney's *The Secrets of Theatre*

Organ Registration. I also used this document particularly Chapter Four, *Suggestions on Rebuilding Theatre Organs* as my principal reference. After burning a good bit of midnight oil and creating much iteration I had my specifications. The revised specifications are shown in Figure 2. I now think one would be way ahead if they picked the specifications from an organ they liked and just built an organ to match it. Of course one would have to have a console large enough for the number of stops such specifications would require.

Console Repairs And Upgrades

A friend on the West Coast found the Rodgers Olympic theatre organ for me. It can be seen in the photo shown in Fig. 3 that the organ was in pretty good shape., but had individual volume controls located in the cheeks of the accompaniment and great keyboards.

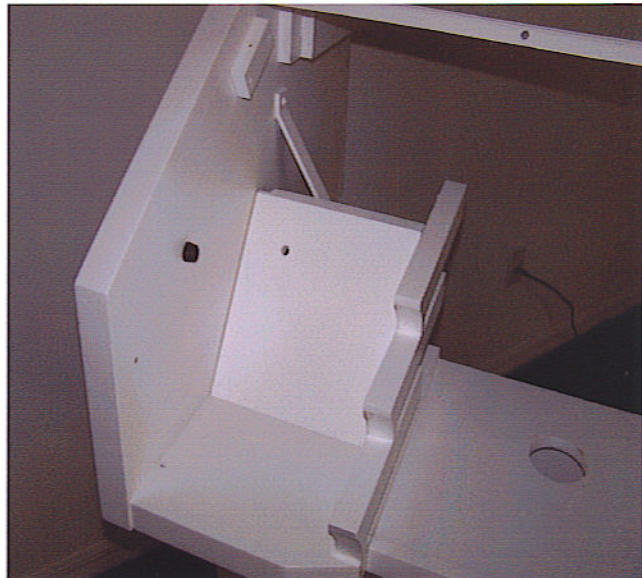


Figure 3

It also had controls for headphones and a simple sequencer. When these devices were removed they left some rather large, unneeded, holes in the console requiring some woodwork to fill in these holes.

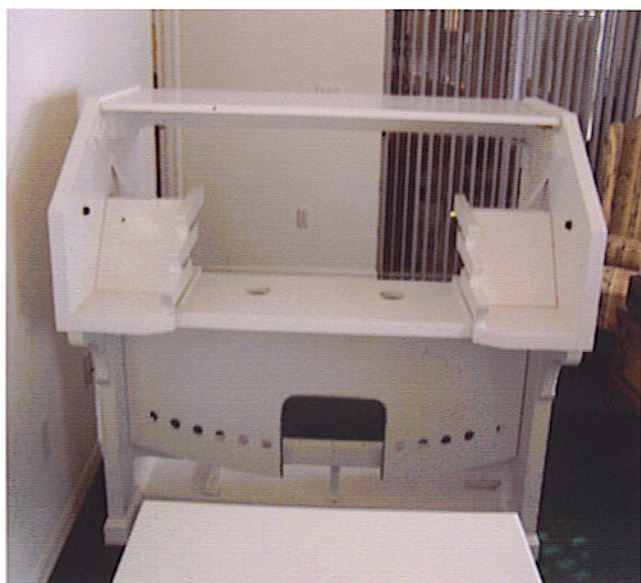
I repaired these holes by cutting out a uniform rectangular hole for each group of holes to be

filled. I then replaced each new larger hole with half inch MDF. I used fiberglass auto body filler to fill in the seams and to fill smaller holes such as those in the keyboard cheeks where the volume controls had been mounted. After sanding and refinishing, you cannot tell that the repairs were made.



My organ console had an off-white finish with a hand applied glaze that made touching up the repaired areas of the console nearly impossible. It was a major decision and expensive to have the console refinished. I have friends who have

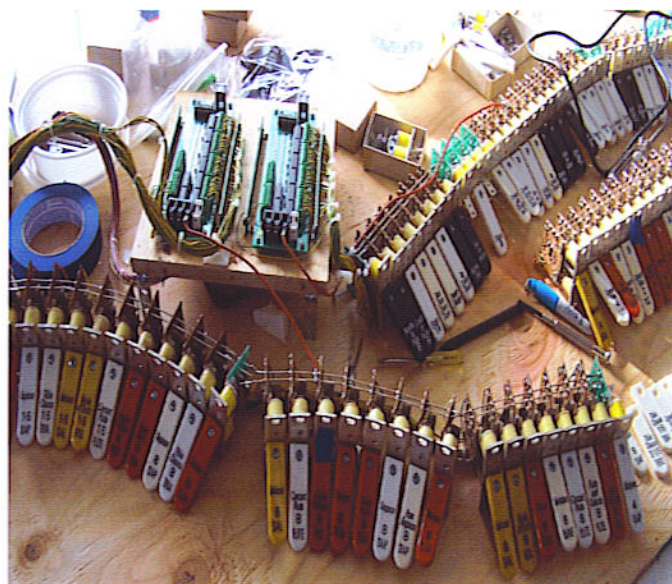
Refinished their own consoles, but they all claim that they would not like to refinish one again. So, I removed the remaining components of the organ and sent it to a furniture refinisher to have repainted. I was fortunate to find a competent refinisher who did a good job in a reasonable amount of time. I chose white as the color for the organ and plan on having some gold paint applied to the trim on the console similar to what was there originally.



I also had the pedal clavier and bench refinished with the console. Since I had removed the pedals to facilitate the clavier's painting, I lightly sanded the pedals and applied two coats of polyurethane on them before reinstalling them in the clavier. I also built a piston rail to install just below the accompaniment piston rail. This additional piston rail provides a location for 15 toy counter pistons. The revised organ specifications also required several changes and additions to all of the organ's pistons. I tried to remove the existing pistons to reuse, but age had taken its toll and they all crumbled on removal. So, I replaced all of them.

The Rodgers console had a nice lighted, acrylic music rack that was in good condition. However, I prefer a music rack similar to that used on Wurlitzer Style D organs so I found a source for the Style D racks and replaced my acrylic one.

Since I had updated the specifications for the organ, I had several additions and modifications to make to the stop rails. Several new stop action magnets (SAMs) and tabs were needed. Additionally, many of the existing tabs needed replacement per the new specifications.

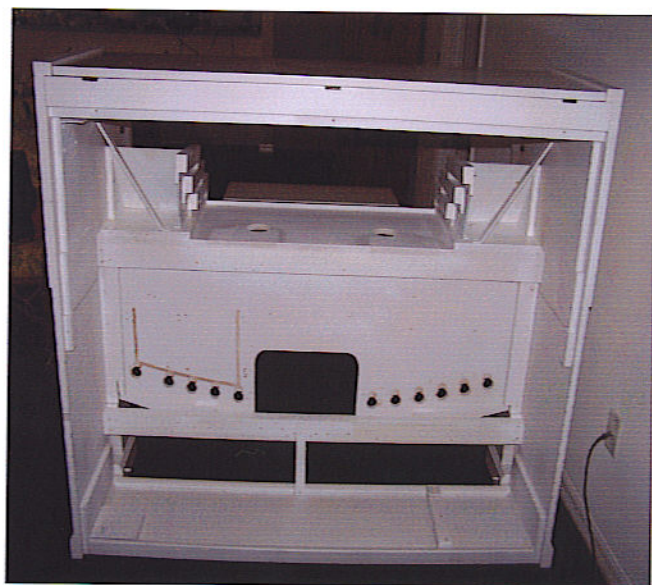


I also built and added two ten-stop partial bolsters to the console. I got the idea for building these new partial bolsters from a photograph I found on the Internet. The photograph was of a similar Rodgers console that had such bolsters installed.

I had removed all of the SAMs from the stop rails prior to sending the console out for painting. I was able to do this and maintain the integrity of the wiring.



This facilitated the addition of new SAMs as well as updating the engraved tabs as necessary to match the revised organ specifications. There was associated with all this console work the requirement to create detailed orders for the parts needed. I facilitated this by developing detailed computer spreadsheets that listed the item, color, engraving, etc. required. I used these spreadsheets to place my orders. I later used these spreadsheets as a basis for developing spreadsheets to identify the digital electronic boards needed to complete the organ.



Here's a rear view of the repaired console waiting for the installation of its parts.

More To Come

In the next installment I will discuss the process of choosing, designing and building the new digital electronic systems into the console. In the last installment, I will discuss sound engine options, and the audio systems I selected for my organ.

R. B. Coulter

Buy, Sell Swap !

For Sale:

Thirty Allen/Reisner SAMs
Three Allen TC-6 Keyboard Manuals
One Allen AGO Pedal Clavier
One Allen Classic Organ Bench

Contact: R. B. Coulter
Rbcoulter@embarqmail.com
315-751-7125

Notes From One of Our Members

I work in a music shop (in) which we specialize in Organ sales and we have two major organ repairers who run there own service companies that do our repairs. I love reading about the different electronic organs as it is a passion of mine! I represent the Allen Organ Company and personally own an Allen Q211 compact pedal board with Ensemble added. I think this would be the only one made in the compact style as it was a special order at the time. I also specialize in Conn and Gulbransen plus the older Rodgers models which we trade. I love the sound of these earlier models and am amazed how they just keep playing! We are one of the last specialist organ shops still operating!

Leith A. Ewert
Prestige Pianos & Organs
www.prestigepianos.com.au

Online Organ Music

Have you checked out listening to organ music online? A new addition to ATOS's web site home page is ATOS Radio!! Click on the link and listen to some of the greatest theatre organists performing songs that you love. Remember, the ATOS website is located at www.atos.org.

We Need To Hear From You!

We need to hear from more of you!! We've received some great information and pictures from several of you. Future issues will be featuring members' instruments in *The Special Corner*.

Send me an email to buckyrph1@gmail.com or mail me a letter by snail mail (regular U. S. Mail)

addressed to:

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and give me your ideas for *ETONE*. All information and comments are welcome!

Email Addresses

The number of members wishing to receive *ETONE* continues to increase. Don't miss the opportunity to receive your newsletter quicker and in color. Email the Editor at buckyrph1@gmail.com and let him know. Due to postal costs, we can no longer mail the newsletter outside the U.S., but we can email a copy. If you don't have an email account, you can set up a free one at AOL.com, Yahoo.com, Gmail.com, etc. Future paper editions of the newsletter will be sent Bulk Rate Mail (even slower than snail mail) as they have been in the past.

Pedal

English Post Horn 16
Tuba Horn 16
Open Diapason 16
Tibia Clausa 16
Salicional 16 w/ Celeste
Viole d'Orchestra 16 w/
Celeste
Concert Flute 16
English Post Horn 8
Tuba Horn 8
Open Diapason 8
Tibia Clausa 8
Clarinet 8
Salicional 8 w/ Celeste
Concert Flute 8
Accomp to Pedal
Great to Pedal
Piano 16
Bass Drum/Snare Drum
Tympani/Triangle
Tap Cymbal/Sizzle Cymbal
Accomp. Traps to Pedal

Accomp.

English Post Horn 8
Trumpet 8
Tuba Horn 8
Open Diapason 8
Horn Diapason 8
Clarinet 8
Salicional 8 w/ Celeste
Viole d'Orchestra 8 w/
Celeste
Oboe Horn 8
Quintadena 8
Concert Flute 8
Flute w/ Celeste 8
Vox Humana 8
Open Diapason 4
Salicional 4 w/ Celeste
Concert Flute 4
Vox Humana 4
Concert Flute 2-1/3
Concert Flute 2
Solo to Accomp 8
Accomp. To Accomp. 4
Piano 8
Marimba 8
Chrysoglott/Sleighbells
Snare Drum/Clip Clop
Castenets/Tom Tom
Tamborine/Hi Hat
Tap Cymbal/Sizzle Cymbal
Alternate Traps

Great

English Post Horn 16
Trumpet 16
Tuba Horn 16
Open Diapason 16
Tibia Clausa 16
Salicional 16 w/ Celeste
Viole d'Orchestra 16 w/
Celeste
Concert Flute 16
Vox Humana 16
English Post Horn 8
Trumpet 8
Tuba Horn 8
Open Diapason 8
Horn Diapason 8
Tibia Clausa 8
Orch. Oboe 8
Kinura 8
Clarinet 8
Salicional 8 w/ Celeste
Viole d'Orch. 8 w/ Celeste
Concert Flute 8
Vox Humana 8
Tibia Clausa 5-1/3
Open Diapason 4
Tibia Clausa 4
Salicional 4 w/ Celeste
Viole d'Orch. 4 w/ Celeste
Concert Flute 4
Vox Humana 4
Tibia Clausa 3-1/5
Tibia Clausa 2-2/3
Concert Flute 2-2/3
Tibia Clausa 2
Concert Flute 2
Tibia Clausa 1-3/5
Tibia Clausa 1
Solo to Great 8
Great to Great 16
Great to Great 4
Piano 8
Piano 4
Xylophone
Glockenspiel
Chrysoglott

Solo

English Post Horn 16
Tuba Horn 16
Tibia Clausa 16
Salicional 16 & 8 w/ Celeste
Viole d'Orchestra 16 & 8 w/
Celeste
English Post Horn 8
Trumpet 8
Tuba Horn 8
Open Diapason 8
Tibia Clausa 8
Orch. Oboe 8
Kinura 8
Clarinet 8
Saxophone 8
Vox Humana 8
Tibia Clausa 4
Tibia Clausa 2-2/3
Tibia Clausa 2
Solo to Solo 16
Solo to Solo 4
Piano 8
Glockenspiel
Xylophone
Chrysoglott
Chimes

Trems

Tibias Vox
Main
Solo

Toy Counter

Aooga Horn
Car Horn
Bird 2
Bird Warble
Chinese Block
Choke Cymbal
Hi-Hat
Persian Roll
Ride Cymbal
Siren
Snare Rim
Snare Roll
Snare Roll Big
Steamboat Whistle
Train Whistle

Misc.

Transposer
MIDI Out
Sostenuto

Fig. 2