

Wurltzer 100 year present.

The Colonials Wurlitzer pipe organ is coming up to its 100th year.

Originally built in 1922, it had 18 ranks of pipes, and over the years it has been expanded to 24 ranks, using 1920`s period pipework and original Wurlitzer chests.

The instrument was taken out of storage in Manasquan, New Jersey, and was refurbished by both volunteer work and the help of the staff of professional Organ Builder Patrick J Murphy & Assoc., of Stowe PA

When it was installed in the Colonial in 2005 – 2006, the 24th rank, a Vox Humana was added and one rank changed, also the decision was made to not refurbish the old electro-pneumatic switching system, as there was no room for it within the chambers, being so bulky.

Instead, a state of the art electronic version of the old system, which uses a desktop computer, a small touch screen monitor housed in a discrete drawer under the keys, and takes up a tenth of the space. This electronic system does not produce any sound whatsoever, as all the sounds are produced by pipes or the actual percussion instrument i.e. Bass Drum, Cymbal, Glockenspiel etc.

This computerized system controls the console and what happens in the chambers, and also gives the ability to record and playback everything that happens as well as allowing multiple organists to have their own memory settings available at one touch of the screen. It also has the advantage of dispensing with the original wrist thick cable from the console to the chambers down to two small 3/8 inch diameter cables.

However, after 15 years of use, the desktop computer and touch screen are beginning to show signs of their age, and although still working, are beginning to become unreliable.

The board of the TOSDV therefore made the decision in 2021 to replace the computer with a modern `all in one` unit.

The original system was a Uniflex 2000, the system and operating software originally developed by Tim Rickman of Uniflex Relay Systems based in Union City Indiana, and subsequently taken over by Dick Wilcox. The system is being upgraded to the Uniflex 4000 operating software along with a new computer and 3 new microprocessors that decode all the information.

The new system has the ability to be remotely controlled wirelessly, allows for one person to be able to tune the instrument instead of two people, and will also allow another keyboard - such as a synthesizer(s), or in fact any modern day digital keyboard equipped with a MIDI interface to be played. Being able to control the organ remotely, means that performances that have been prerecorded by organists on the Uniflex system, can be played back from another computer or tablet elsewhere within the auditorium.

The new system **was installed on Dec 27-28 of 2021**, after the last public performance and before the first public performance of 2022. It was installed by myself and Matt Jones, with help from Jack Serdy, who is the crew chief and originally negotiated the acquisition and installation of this fine piece of American musical history.

All three of us are professional Organ Builders, myself and Matt Jones with Patrick J Murphy, with a combined experience of over 70 yrs. Jack Serdy has been retired from PJM for several years, but still has a hand in the Organ Building world.

This new system will allow the Colonials Wurlitzer Opus 585 to continue to give pleasure to both the organists that play it, and the masses that come to hear and see how movies were enjoyed one hundred years ago, to live long into the future of the Colonial Theater of Phoenixville Pennsylvania.

What follows are a few pictures.

Happy Birthday Opus 585!

Chris Mills.



The old desktop computer above (left)

The new computer being configured by Matt Jones (center) and Chris Mills.



This is what the computer replaces in the console.



And this is what the computer replaces in the chambers.



On the left is part of a switch stack with a relay unit to the right. Each individual contact on the relay is wired to one contact on the switches. These switching units can be up to 6 ft high.

Same working principle as above but on a MUCH larger scale. This is a relay unit from the Atlantic City Auditorium Organ. The four copper plates on each of the white pneumatic motors, make 160+ contacts at the same time. The black cable seen on the left contains upwards of 1,120 wires and is over an inch in diameter.



Photo by permission of Nathan Bryson, Curator of the Atlantic City Ballroom and Auditorium organs.

Another picture of the outside of the same relay room, The thick black line is not a piece of wood, but the final cable exiting the relay room. This cable is as thick as your upper arm and has several thousand wires in it!!!



Photo by permission of Nathan Bryson, Curator of the Atlantic City Ballroom and Auditorium organs.

The old processor board (left) and one of 3 new processor boards (right) installed in the colonial. This particular processor controls the console. The other two control each chamber of the Colonial.



This is the Main chamber of the Colonials Wurlitzer. The relay board is behind the ladder. On the left is the Bass Drum.



A picture showing the Chimes (center back) the Harp (orange boxes) and the Marimba Harp (foreground) along with the effects unit (top fore).



Remember the Atlantic City cable?? The Ethernet cable below totally replaces that enormous cable.



With the MIDI capability of the new Uniflex 4000 system, below, in the center of the picture, are two synthesizer modules that can be operated by the Colonials organist. It is also possible to play the Wurlitzer from a digital keyboard.



Photo by Chris Mills

Finally, the power plant of the Colonial's Wurlitzer. Hidden deep in the basement, this enormous 15 Hp twin fan centrifugal blower, delivers a whopping 3000 cubic feet of wind per minute at 15 inches pressure (water guage) to supply wind to all the pipes and percussions, with the exception of the Piano and Accordion, which operate by vacuum as opposed to pressure.

