What is a VTPO (Virtual Theatre Pipe Organ)?

The twentieth century with all its electronic development has seen many attempts to recreate 'electronically' the sound of a pipe organ, with varying success. The advent of affordable, powerful computer based digital technology in the last few years has brought to life a whole new generation of 'non-pipe' organ sound, which switches pipe organ samples rather than electronically creating the tones. Today, even domestic computers are so powerful, anyone can create superb pipe organ music using a setup as basic as their regular desktop or laptop computer, free downloaded software, a MIDI keyboard and a good amplifier and speakers.

Of course the sky is the limit, and the final Virtual Theatre Pipe Organ system you create is only bound by your imagination and your wallet. The virtual console on your screen is a fully functional pipe organ console providing all the stops, couplers, pistons, swell & crescendo functions found on a real instrument. These give an authentic experience rarely found even on very expensive traditional electronic instruments. This functionality coupled with the superb sound at affordable costs, creates a whole new musical experience not to be missed.

What do you need to start experimenting with VTPO's?

Almost any home computer running Windows XP (or VISTA) and having a sound card with speakers or headphones will be able to run some of the VTPO software. Miditzer is probably the easiest one to start with. It can be downloaded over the internet for free (see next page) and played in a simple form using your computer-mouse and computer-keyboard. Even people with little computer knowledge will find they can download the program, run the install, and start playing sounds on their computer in a few minutes. The quality of the sound you will hear will depend on the amplifier and speakers you have connected to your computer. I assure you, you will be impressed. You will be able to set your own registrations on a Wurlitzer and create your own piston combinations.

Where can it lead?

You can connect keyboards to your computer using MIDI interface which will allow you to play the keys of these organs. You may already have one you can use, or can purchase a low cost Casio or Yamaha keyboard to start experimenting. (Just make sure it has MIDI function, and you buy the MIDI-to-computer interface cable). It is also possible to purchase a MIDI pedalboard, however these are relatively more expensive. Another option is to connect an organ that already has MIDI to your computer. Yamaha and Technics organs (for example) built in the late 80's and 90's have this function, as do later model Rogers and Allen organs. I believe all new console organs currently available have MIDI. One further option is to add the MIDI function to an old electronic organ. The cost of this can vary dramatically from a few hundred dollars (if you have some electronics skills) to a few thousand dollars to get a commercial system installed on your organ. Depending on the complexity of the system you decide to use (or work up to) it is possible to have piston combination buttons, swell pedals, crescendo pedal, second touch and even fully operating stop tabs.

The biggest thing to keep in mind in building a VTPO is the sound system. To get a "big" sound you will need a "big" amplifier and "big" speakers. You can start off with headphones, or your existing hi-fi or home cinema system. A good sub-woofer would be high on the shopping list.

Once you have a MIDI organ console set up, you can run any or all of the virtual organ software packages mentioned below (or other instruments for that matter). Your organ will become future proof. You will be able to update the software while keeping the same keyboards and pedals. You can change consoles eg. From Theatre to Classical, You can change or add rank samples.
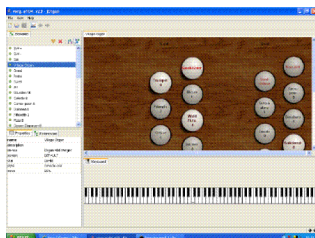
What VTPO software is available?

These are some links to, and descriptions of, a range of sources of VTPO software. There are more, but this will get you started on an interesting journey.

Miditzer http://www.virtualorgan.com/ offers a Wurlitzer Style 216 replica, 2 keyboard organ as a free package. (They also offer a Wurlitzer Style 260SP replica, 3 keyboard organ for a US$100.00 donation to a TPO restoration fund.) This is a good option for beginners because it will operate with little or no setting up. It also offers a lot to advanced users in its flexibility to connect with external MIDI hardware, and in its adherence to historical function and operation. Miditzer will run on an average XP home computer.

jOrgan http://jorgan.sourceforge.net/doku.php/introduction is another free organ software. This one allows you to create your own virtual console (or layout of stops). There are both classical/church organ shells (or appearance) as well as a theatre organ appearance. This program requires a second piece of software to actually make sound. (it would be possible to create a replica of a specific organ using this software if you had sound samples of the ranks, or installed some from the "USF" (mentioned below). jOrgan will run on an average XP home computer, and also on Linux.

Hauptwerk http://www.crumhorn-labs.com/index.shtml is commercially available organ software package. The base software is ~$320.00 (£125.00). You can then use some free organ configurations or purchase organ configurations created to run with Hauptwerk. These organ configurations will often include sampled organ ranks like the packages created by Neil Jensen using some sampled ranks from "Christie" (the TOSA-QLD Theatre Pipe Organ) http://www.keymediaproductions.com/index.php?page=2 at further cost of ~$500.00. Hauptwerk will require a high specification computer and memory. Their web site actually recommends a high specification Apple MAC.

Artisan Organ Company http://www.artisanorgans.com/ have an interesting web site offering hardware you could buy to build you own VTPO. They also have a software voicing package.

Classic Organ Works http://www.organworks.com/Web/products/midi_works.asp offer a full range of hardware ready to plug in and play. (see particularly the "Product List")

There is another commercial virtual organ that is not a classical or theatre organ. It is a replica of a **Hammond B4** http://www.native-instruments.com/index.php?id=b4ii . This sells for ~$275.00.

Other useful links:

Miditzer uses Bruce Miles synthesized sound fonts as default for a very good compromise of compact file size and surprisingly realistic sounds. This link will take you a list of organ soundfonts.
 http://www.hammersound.net/cgi-bin/soundlink.pl?action=view_category&category=Organ&ListStart=0&ListLength=15
From there you can progress to real recorded samples.

Kent Allman is facilitating a (USF) Universal Sound Font, where people are sending him recorded samples of ranks from organs all over the world. (His web site also has some preconfigured jOrgan configurations. http://prosites-allmanmusic.homestead.com/jOrgan.html and a lot more VTPO information and links)

Interesting web sites to see what other people are doing with VTPO's:

http://theatreorgans.com/walnuthill/WurliTzer.htm
http://www.jbwebserver.net/mforum/forum_topics.asp?FID=40
http://theatreorgans.com/owenjones/index.htm
http://www.virtualtheatreorgans.com/index.html

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