

## New Uniflex Remote Tuning Devices Design Philosophy

A couple of weeks ago we sent out a request for ideas and the response was both gratifying and overwhelming! Many, many different ideas and philosophies came out causing us to rethink the whole design of the way remote tuning devices had been used. Ideas ranged from the simple 4-button up-down-select devices to extremely complex "wouldn't it be nice if..." devices capable of controlling not only the organ, but also the trains running through Union Station! Some were wired, others were wireless. Some required trips back to the console, others were completely self-contained. Some said size was a factor as well as ease-of-use while others wanted the flexibility of a small laptop in the chamber.

It soon became apparent to me that a single device designed to do all this would not only be huge, but also too costly to design and manufacture. Way too many input and output signals would be required which decreases the usable pin count in the console and requires additional wiring. I have bigger aspirations than a mobile phone running into a hacked-up definition file as many have lived in the past.

### Better Solutions Based on Software

#### After all, isn't that what makes the Uniflex system "Uniquely flexible"?

Enter the world of PC computer remote control. Many inexpensive media and presentation remote control devices are commonly available at local computer stores. Most of them work by transmitting a signal to a simple USB receiver plugged into the PC computer. So I recently purchased a "Gyration" R4000 PC remote control (cost about \$100 USD) which is an RF remote designed to control the Media Center on a PC. It talks wirelessly to a USB receiver, like a wireless mouse, and simulates key presses and mouse inputs. A new "tuning" mode in the relay will recognize the remote key/mouse inputs and perform specific functions inside the relay without running through the definition file. It will allow you to perform specific functions such as selecting one or two ranks, selecting pitches, incrementing/decrementing note numbers in the ranks, and running in chromatic or diatonic mode.

All of this can be done with no additional wiring and no use of valuable signal pins. The next step involves flexibility in allowing you, the customer, to design your own remote tuning device. I am working on a way to allow the remote control device keys to activate specific functions that you choose which are useful to the tuning process in a way that makes sense to you, not to me. This will allow you to choose which remote-control device

you want to use, as simple or as complex as you choose. My intent is to have a collection of various functions that technicians use and allow the user to select which buttons on the remote activate which functions. This would be stored in a file such as "Tuner.ini" in the base directory.

There are many variations of this type of PC-media remote on the market besides the Gyration R4000. With a tuner.ini file the user could select his own type of remote and use it to do whatever he wants. Remember, I am not constrained to using definition file programming as was used in past designs. This functionality will go directly into the program code. If the remote will not reach the computer (wherever it is) then a USB extender could be used to extend the USB receiver into the chambers over a separate CAT-5 cable. These USB extenders are less than \$50 USD.

**Inexpensive, Programmable, Readily Available and NO Additional Wiring**  
**What more could you want?**

How about a more high-tech approach as well? If you have a Uniflex 3000 system which runs on a network or if you add a simple network router to your Uniflex 2000 system, you might like to use an Apple iPhone or iPod to talk to the network and do the remote control. Again, functional programmability would allow you to design your own type of controller using some pre-programmed application in the iPhone or iPod. Feedback screens would show you what is going on as well. Besides, doesn't everyone need an excuse to get one of those fancy new phones?

I have already started work on the iPhone network programming using a brand-spanking new iMAC computer and I am eagerly awaiting my developer certificate from Apple so I can start testing on real devices instead of the software simulator that they provide. I can then put these new remote control apps right onto the Apple "App Store" website which will allow you to directly download them into your iPhone or iTouch iPod.

And don't forget, you would not be constrained to using only one device at a time. How about a wireless laptop temporarily placed in some convenient location in the chamber for doing rank selections with a small 4-button remote for "up-down-work-it" commands? Or an iPhone in your pocket for selection commands and a more robust small remote for the more frequently used commands? Sure would beat running back to the console just to change ranks.

Some of you have suggested the far-out approach of using voice commands to do all this. Not so far-out considering that Apple is coming out with voice recognition in their next release of the iPhone operating system. And there are some pretty nifty iPhone apps that provide tuning by pitch for about \$6.00 each.

**Remote Control Becomes "Couch Potato" Control**  
**Uniflex can give you all the control at your finger-tips.**

As if all the above is not enough, this same remote could be used to control the organ by assigning different commands to the various buttons. Playback from the "couch potato" position could easily be accomplished. Recording tracks and songs could be controlled wirelessly as well. In fact, anything that can be done with an organ command could be assigned to any button on one of these remotes. And new commands are relatively easy to add. So let Uniflex and your imagination take you where no other relay can.

**Uniflex and You**  
**Together we can turn big dreams into great realities.**

Since this is still in the development stage, we welcome all comments and suggestions concerning the idea. Please help us define the functions that you feel would be useful. Why not dream big and share your thoughts with us. Together we can keep Uniflex on the cutting edge of technology and flexibility.