

WHY KSPL?

The **Kowalshyn Servo Pneumatic Lever** and its contribution to responsive key action, voicing and control of pipe speech.

Our passion has always been to build mechanical action organs with which artists can beautifully and sensitively play the organ literature. We build organs ranging from gently-voiced single manual organs in small rooms, to large five-manual organs capable of engaging vast cathedrals and concert halls.

Sensitive mechanical action on a symphonic scale

Large scale mechanical action organs present formidable design challenges. They're designed to engage large spaces, even to rise above the volume of a symphony orchestra. These organs are physically large, and the key action of a single manual division may need to supply wind to play multiple 16' stops, possibly controlling several pallets (valves) at once. Our task is to design actions which can couple from three to five such large scale divisions (including Octaves Graves, opening perhaps 12 pallets simultaneously!) – while maintaining the playing sensitivity of a two-manual tracker organ.



magnets to open the coupled pallets. When this type of electrical control is introduced to the system it opens the pallets with an invariable suddenness, delivering the wind to the pipes much more forcibly. Thus to keep the pipes from misbehaving, it becomes necessary for the voicer to “slow down” their speech.

Fisk voicer Stephen Paul Kowalshyn thought through this problem, and developed the Kowalshyn Servo Pneumatic Lever, or KSPL. It is somewhat similar to the Barker Lever; but unlike the Barker Lever, the KSPL is a true servo: it faithfully follows the speed and travel of organists' fingers. Sixty-one of these KSPL levers, mounted in a pressurized plenum, labor almost transparently to greatly multiply the power of the organist's touch.

When another division is coupled to the Great, the KSPL does the all of the hard work of coupling, while the organist maintains the feel and control of playing the Great action alone.

Voicing– no compromises necessary

When a pipe is fed wind from a sensitive mechanical action, it can be voiced on the “quick” side, speaking very promptly. Pipes voiced in this way are able to respond to nuances in the performer's attack and release of the keys, producing a tone that is alive and interesting to the listener.

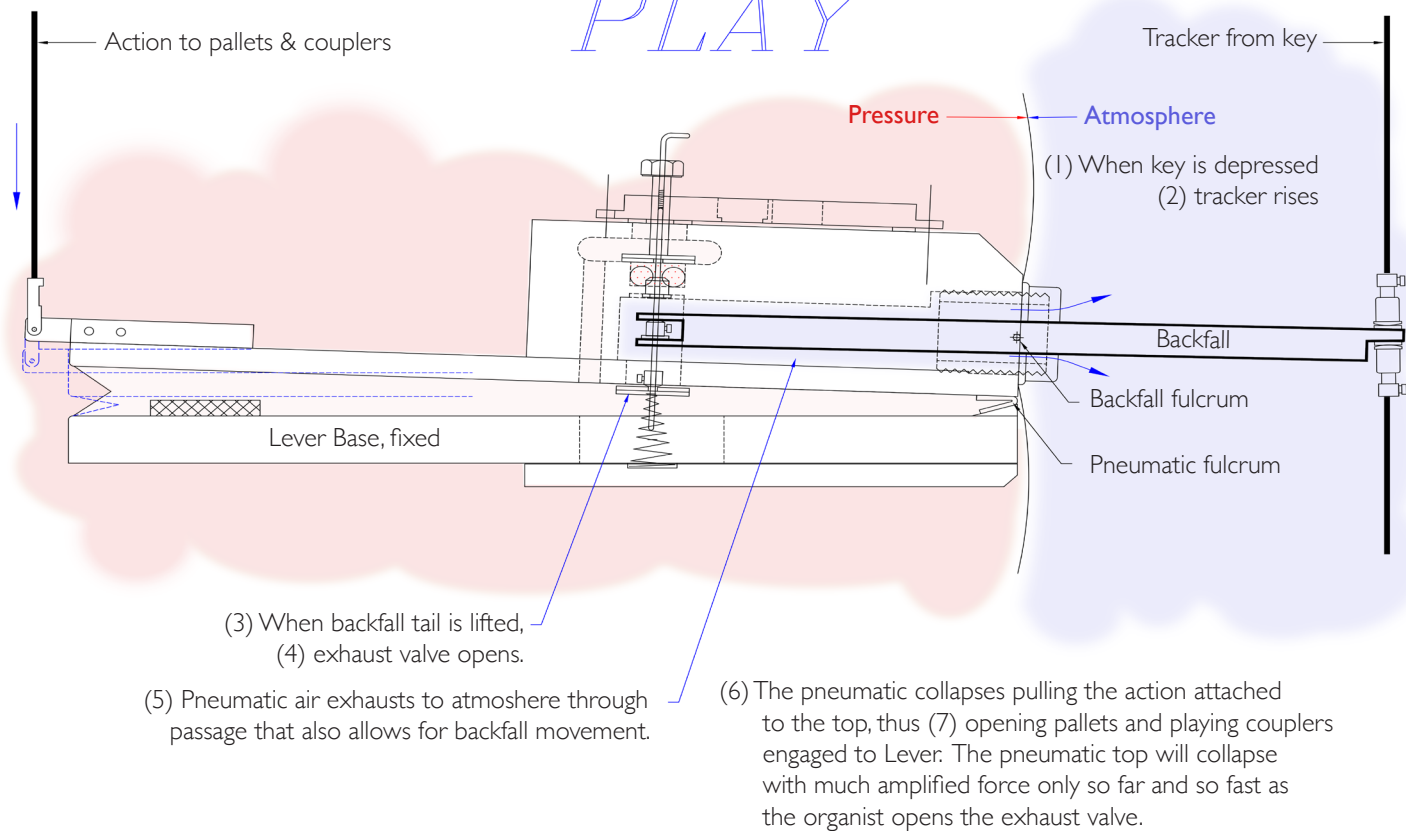
Organ builders sometimes use electric action to reduce the forces of coupling, using key switches to activate

Reliable and maintainable over the centuries

The first application of the KSPL was Opus 95, installed in 1990 for David Fuller at the State University at Buffalo. Since then we have built twenty-two KSPL systems. They have performed faithfully, with a minimum of maintenance and adjustment, over the past 28 years. Unlike electronic control systems, the KSPL is maintainable by standard organ technicians, and will be for hundreds of years, using traditional techniques and materials.

Fisk

PLAY



RELEASE

