



Merging Tradition and Technology

ICS-4000™

peterson
ELECTRO-MUSICAL PRODUCTS, INC.



Do you want more flexibility?

In today's changing world, it's all about keeping one's options open. Churches are being designed and renovated to accommodate different liturgical expressions. Pews succumb to chairs for more flexible seating arrangements. Chancels can become performance spaces. Church music programs increasingly encompass a wide variety of styles, repertory, and instruments.

As an organist or organ committee member, good stewardship requires that you plan for flexibility from the pipe organ too.

Let's assume you're exploring building a new pipe organ or renovating your existing instrument. You're considering an electric action – perhaps for its flexibility of registration, or maybe because a detached electric console can be easily moved. Are you thinking about making preparations for future additions? You might even be contemplating electrification of a mechanical action organ.

How would you like your pipe organ to capture performances at the touch of a button, with no external recording device at all? Would your summer substitute benefit from a transposing feature on the console? Would you like a wider variety of manual or pedal couplers? How about provisions for playing and controlling MIDI instruments through the pipe organ's keyboards, pistons, and expression shoes? Would you like to create your own crescendo settings - and have the solid-state system guide you? What about security so that your piston settings aren't inadvertently changed?

Now, you can enjoy unprecedented flexibility from a pipe organ's control system. Whether new or rebuilt, your pipe organ can include the advanced features expected by renowned concert organists, while remaining comfortable for all to play. Whether you play a large concert organ or a small instrument in a rural church, one product hits the mark like no other system can. . .



Photo credit:
Console photo by Patrick J. Murphy & Associates, Inc.



The Peterson ICS-4000 “The Heartbeat of Your Pipe Organ”

Peterson Electro-Musical Products, Inc, the longstanding leader at “merging modern technology with the art of organ building,” is proud to bring you the most flexible, feature-rich, yet easy-to-use pipe organ control system ever produced: the ICS-4000 Integrated Control System.

Elegant and simple in appearance on your console, the ICS-4000's control panel is remarkably intuitive to use. But that understated little control panel provides access to a sophisticated, microprocessor-based controller that is powerful enough to welcome a touring recitalist with a world of custom features.

On-screen sentences guide you to transpose; create and organize crescendo and tutti settings; operate MIDI equipment; create, name, and edit piston sequencer patterns using pistons from any memory level; record every nuance of a performance and later play back each piece flawlessly; and configure stops, couplers, and reversibles to operate in a host of different ways. There are even clearly worded, friendly advisory messages designed to help if you forget how to do something.

Each organist's personal settings for pistons and other controls can be neatly organized and password protected under his or her own name. Settings can be copied to other memory levels at the press of a button, or transferred to removable data storage devices.

A large number of Peterson ICS-4000 control systems are in daily and weekly use by professional organists, including several on grand and mechanically intricate pipe organs. Research and development, like excellent customer service, are parallel ongoing commitments at the Peterson company. This system's superiority results from the experience gained from providing thousands of pipe organ control systems over several decades. The ICS-4000 has met and surpassed musicians' expectations and opened up new ways of approaching the pipe organ. One renowned concert organist summarized it by saying, “It drives very well!”



How does it work?

The relay/switching, combination action, and other functions are performed through software instructions to a powerful central processing unit located in the console and a number of secondary microcontrollers in console and chamber locations. Some of the microcontrollers scan the keyboards, stops, couplers, pistons, expression pedals and miscellaneous console controls while others coordinate note actions and other outputs. Distributing the processing in this manner allows a large number of tasks to be performed simultaneously rather than sequentially. Computer-industry-standard Ethernet connections carry information between the console and chambers at high speed with flawless accuracy. The components are housed in compact, elegant enclosures, and encourage a neat installation.

The result is a beautifully responsive action, with repetition characteristics as excellent as your organ builder's wind chests can provide. Experienced organists and organ builders alike have commented that instruments controlled by an ICS-4000 seem to "play better" than others.



Left: The ICS-4000™ installed in a console
Right: The ICS-4000™ chamber "cages" being tested in the lab.



What makes the ICS-4000 more flexible than others?

You'll find the ICS-4000™ to be almost as unobtrusive as if it weren't even there. Simply sit down at the console, set a few pistons just as you would any electric action organ from any time in the 20th century, and play. This is truly a control system that doesn't need to be "fed" to be used. It's that easy!

Should you wish to take advantage of the more advanced features that the ICS-4000 sports, you'll find step-by-step instructions in a fully illustrated, easy-to-read set of tutorial instructions. You can truly use as little or as much of the system's sophistication as you like, need, or are comfortable with.

The ICS-4000 is the perfect control system for new and rebuilt pipe organs, large and small. Historic consoles can be elegantly retrofitted by installing the control panel in a sliding drawer out of sight under the key bed. Special pistons and additional display readouts can be used when desired to duplicate control panel functions for even more immediate access. *Virtually any function that was included on an organ by its original manufacturer can be duplicated and supported.*

There's no more efficient system to wire than the Peterson ICS-4000. If you have older Peterson components in your organ, so much the better! Your existing Peterson key, stop, and windchest junctions use the same connectors as the ICS. Wiring is often reduced to virtually just plugging in connectors! If you have an older system from another manufacturer, wiring to the new Peterson connectors is easily and neatly accomplished. If you have a pipe organ with an outdated switching system or combination action, now may be an ideal time to upgrade the instrument with a new solid-state system.

Each organ's unique specification is configured, and can be changed, by a Peterson engineer who enters information about your organ into a proprietary Microsoft Windows®-based program created by Peterson. If you want to add a coupler, or change one of the stop control's functions, a Peterson engineer will change the configuration file and email it to your



organ builder, who can then load the change into your ICS-4000™ via the built-in removable media drive. Instantly, the Solo to Choir 4' Coupler can become your French Manual Transfer coupler! Great and Choir divisional pistons can swap locations under their new “home” keyboards if you like. No re-wiring is necessary. In fact, you don't even have to remove the top from the console – but you may want to order a new engraved coupler tablet!

Are you a “Skinner Person,” occasionally wanting the pedal divisional pistons to be activated by the manual divisional pistons? Or, would you rather have manual divisional pistons include pedal stops, to further increase the combination action's flexibility? Either (or both) is easily possible. In fact, with the ICS-4000 you can turn every piston into a general piston if you like!

When a concert organist from “across the pond” visits your instrument and wants to copy piston settings from one memory level onto succeeding levels, it's no problem!



Photo credits:
Photographs by John Grunke and John-Paul Buzard



What about longevity? What about customer support?

Let's be honest. Every supplier's equipment will work when new. But experienced organbuilders know that the Peterson company has always been committed to long operational life of their products, excellent technical support, and superior warranty and service. The limited warranty period on Peterson products for the pipe organ is an impressive ten years! Check out the Conditions of Sale documents for details. Peterson has established the standard for superior customer service during its 55-plus years in the organ industry. No other manufacturer of solid-state control systems for the pipe organ industry even comes close!

Individual electrical components of all Peterson systems are carefully selected for long life under demanding circumstances and for long-term availability, and then incorporated into circuit board modules manufactured proprietarily by Peterson. When design evolution occurs, newer assemblies are nearly always designed to be compatible with older systems. Peterson has a long history of building each family of control system for many years, in volumes far greater than that of any competing product. Replacement circuit boards, if ever required for any reason, can be simply plugged in. Software updates can be sent from Peterson over the Internet and installed in minutes by an organ builder with no specialized equipment.

We invite you to "test-drive" a new Peterson ICS-4000™ system on Peterson's interactive website: www.ics4000.com. In addition to a comprehensive list of ICS-4000 features, and some information about the company, you will find a unique demonstration of how this remarkable product is used.

Talk with your organbuilder about the ICS-4000, and how it can bring your new or renovated pipe organ an unprecedented level of flexibility, utility, and performance!

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