Master Stop Processor MSP-1000™

The ultimate stand-alone combination system

- 99 levels of combination action memory.
- Available direct-access keypad for memory level selection.
- Unlimited stop capacity.
- 60 crescendo shoe positions on each of 4 levels.
- Optional Programmable or "European" piston sequencer.
- "Any piston" next and previous function.
- Manual transfer on tablet or piston.
- Pedal piston couplers.
- "Pedal on any manual" control.
- Blind reversibles.
- Organist assignable reversibles.
- Restore piston.
- Many other specialized features & controls.
- Totally configurable on-site.
- EEPROM memory requires no batteries.
- Extensive built-in diagnostics.

The Master Stop Processor MSP-1000™ raises combination system performance and reliability to new levels while maintaining all of the traditional functions organists have come to expect.

Organists may select from up to 99 independent levels of combination action memory with Up and Down buttons and a digital LED display. The optional direct-access keypad allows jumping to any memory level by simply pressing a numbered button or two.

Four independent crescendo levels can be set and modified at any time when the Mode Select switch is in the "Save" position. Programming a crescendo is as easy as setting a piston and any number of stops or couplers can be added or removed on each of 60 shoe positions. Pressing the Set Latch button allows each shoe position's registration to be automatically set as the shoe position number is advanced. Set to an organist's requirements, the crescendo shoe becomes a valuable asset during any performance.

The Master Stop Processor MSP-1000 can accommodate any number of divisional and general pistons to control an unlimited number of stops in a multitude of divisions. Moving and "blind" reversibles are available for any function as well as "organist assigned" reversibles that provide unprecedented flexibility. Through the use of an "assignable" toe stud or piston, the organist may command any stop, group of stops, or function to reverse, cancel, or turn on as desired.

Holding any piston for more than a second allows stops to be set in the traditional "tripper" *(hold and set)* method, and the use of a Set piston provides the convenience of a capture system; either method can be used according to the organist's preference. A visual indication is provided at the control panel whenever stop position changes may be set into memory.

Any one of the following methods can select sforzandos or tuttis. A separate tutti can be provided for each combination action memory level, or up to four tutti levels can be accessed through their own pistons. An optional Tutti Select Control Panel can allow the four levels controlled by one piston to sound independently or be added *(stacked)* together.

A Restore piston can be invaluable if a piston is accidentally pushed during a performance or when setting combinations. Pushing Restore will promptly return the previous registration even if stop controls had been moved by hand. The Restore piston may also be used to return to memory a combination that was accidentally overwritten.

Placing the Mode Select switch in "Edit" will enable the tabs or knobs to move, indicating crescendo or sforzando memory settings. Through the use of this method, crescendo and sforzando settings can be checked visually, quietly, at any time.

The MSP-1000 provides 8 lockout circuits, which can be assigned the desired combination action, crescendo, and tutti memory levels to prevent unauthorized setting. The memory levels allocated to each circuit can easily be modified at any time by an organ technician.

All circuit boards are engineered, assembled, soldered, and tested by Peterson specialists to exacting standards. Every component used in this superior system has been carefully selected to assure long life under demanding conditions. Before shipping, each Master Stop Processor must undergo multiple quality inspections and pass a rigorous test procedure.

Indicators are provided on each circuit board to provide the organ technician a visual means to determine the system's status at any given moment. Also included are diagnostics able to automatically de-activate a stuck thumb piston, toe stud or other mechanical failure. Since all piston, crescendo and sforzando memories are permanently held until you wish to change them, there is never a concern over memory loss during a power failure and the need for batteries is completely eliminated.

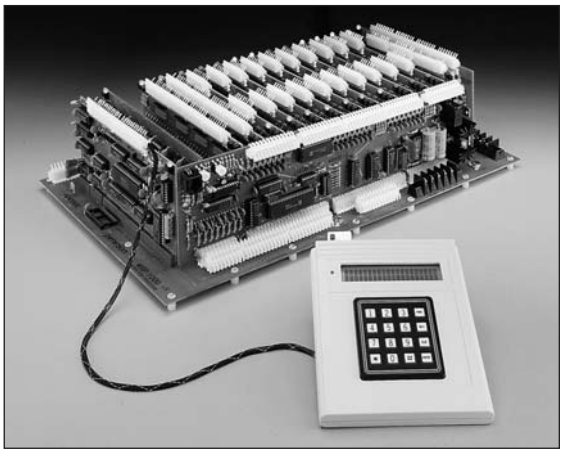
Everyone has his or her own unique idea of the perfect combination system. This is precisely why the MSP-1000 has such a broad selection of features and functions to choose from. With an easy-to-use Set-Up Terminal, and a simple program procedure, an organ builder can control any or all aspects of the system's operation. The Master Stop Processor's modular design and programming flexibility allow future additions or specification changes to be made at any time.

The Peterson MSP-1000's available Piston Sequencer option enhances the performance of this combination system even further. An exclusive feature allows you to select either of two Piston Sequencer formats.

The Programmable Piston Sequencer format allows a series of up to 99 piston presses to be stored in each combination action memory level. By using the Set piston in conjunction with any general, divisional, reversible, or special function piston, with the Piston Sequencer switch in the "on" position, you may enter the desired registration changes into memory. As each piston is entered, or recalled during a performance, the convenient LED readout will display the sequence position and corresponding piston name and number. The most complicated registration changes for accompaniments or extended symphonic works are easily accommodated by entering a predetermined series of piston pushes and then recalling them at the appropriate time during a performance. You may advance or return through the sequence by using the "Next" and "Previous" buttons on the control panel or "Next" and "Previous" pistons or toe studs. In addition, any number of general or divisional pistons can be assigned to serve a "next" or "previous" function when the piston sequencer is on. This can be an important advantage in that these functions can be positioned to offer the greatest convenience. The "Insert" and "Delete" buttons are provided to facilitate modifications to a previously programmed sequence. A piston can be added to or removed from a series easily at any time.

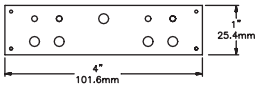
Selecting the European Piston Sequencer format allows one to advance or return through the general pistons by using any "Next" or " Previous" piston. The Master Stop Processor will "remember" the last general piston pressed *(as indicated by the LED readout)* and step up to a higher or down to a lower general piston when an assigned "Next" or "Previous" piston is pushed. To expand the sequence beyond the number of generals available on a particular organ you may choose to include the next higher or lower memory levels as part of the sequence.

An advanced intelligent system, able to fulfill the requirements for varied styles of organ building and performance techniques, the Master Stop Processor MSP-1000 has the powerful technology and traditional design you have come to expect from Peterson, the world's leading supplier of solid state systems for the pipe organ.

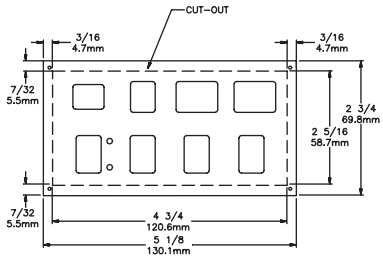


A typical MSP-1000™ with included Set-up Terminal.

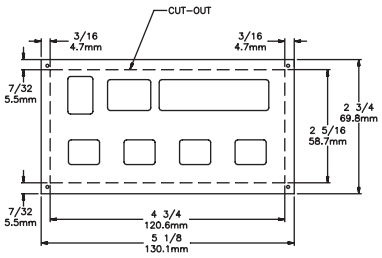
TECHNICAL INFORMATION



MSP tutti Select Panel



MSP Main Control Panel



MSP Piston Sequencer Panel