

## CREATING A PISTON SEQUENCE IN YOUR ORGANIST FOLDER

*Note: In this section of several pages, the term “Piston Sequencer” refers to the “American/ Programmable” Piston Sequencer. If your organ has been configured to have a “European Piston Sequencer” instead, please refer to the page of this instruction manual titled “The European Piston Sequencer”.*

From the Home Screen...

1. Press the MENU button. This will display a screen with a list of menus.
2. Turn the knob to select “>Piston sequencer”, then press the ENTER button. This will display a screen for selecting the desired organist folder.
3. Turn the knob to select an organist folder name, then press the ENTER button.
4. Turn the knob to select “>Pistn sequence list”, then press the ENTER button.
5. Turn the knob to select “>new...”, then press the ENTER button. This will display a screen for entering a name for your new piston sequence.
6. Select each letter by turning the knob and then pressing the RIGHT button. Press the DONE button when you are finished. This will display an informational screen about the sequence you are about to create.
7. Press the MENU button to display a list of available piston sequencer operations. (Note: when creating a new piston sequence, only “append” and “change memory level” are available, but when you have selected an existing piston sequence, several more options are displayed as described later).
8. Turn the knob to select “>Append”, then press the ENTER button.
9. Press pistons in the desired order to create a list of any length required. You can play the organ and create the list in “real time” if you wish. As you press each piston its name, followed by a number in parentheses representing the current memory level within your organist folder, will appear.
10. Press the DONE button when you are finished. This will display a list of options to play or modify the list you’ve just created. You can then press the BACK button to display information about the piston sequence, and then the HOME button to return to the Home Screen.



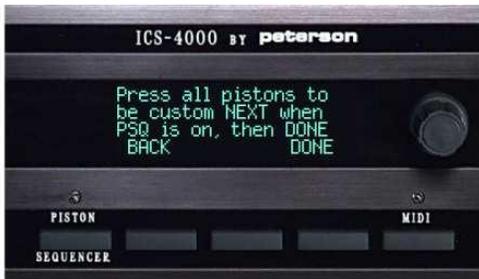
## DEFINING CUSTOM NEXT AND PREVIOUS PISTONS

From the Home Screen...

1. Press the MENU button. This will display a screen with a list of menus.
2. Turn the knob to select ">Piston sequencer", then press the ENTER button. This will display a screen for selecting the desired organist folder.
3. Turn the knob to select an organist folder name, then press the ENTER button.
4. Turn the knob to select ">Define NEXT pistons", then press the ENTER button.
5. Press all of the "regular" pistons that you want to become custom NEXT pistons when the piston sequencer is turned on. A confirming message will appear briefly after each press. When you are finished, press the DONE button.
6. Follow exactly the same procedure after selecting ">Define PREV pistons" to assign custom PREVIOUS pistons.

These pistons will have their custom function whenever the Piston Sequencer button on the CDU is latched on and the red LED above the button is illuminated.





## SELECTING AN EXISTING PISTON SEQUENCE BY NAME

From the Home Screen...

1. Press the MENU button. This will display a screen with a list of menus.
2. Turn the knob to select ">Piston sequencer", then press the ENTER button. This will display a screen for selecting the desired organist folder.
3. Turn the knob to select an organist folder name, then press the ENTER button.
4. Turn the knob to select ">Piston sequence list", then press the ENTER button.
5. Turn the knob to select the name of the piston sequence that you wish to use or modify, then press the ENTER button. This will display an informational screen about the sequence you are about to use or modify.
6. You can now press the MENU button to display a screen with various options or press the HOME button to return to the Home Screen.





## USING A PISTON SEQUENCE WHILE PLAYING THE ORGAN

After choosing a sequence as explained in steps 1-4 of the section above called “Selecting an existing piston sequence by name”...

1. Press the MENU button. This will display a screen with a list of options.
2. Turn the knob to select “>Play”, then press the ENTER button.
3. Press the button on the CDU labeled “Piston Sequencer” to enable any NEXT and PREVIOUS pistons on the organ console. The red LED on the CDU will latch on.
4. Use the NEXT and PREVIOUS buttons on the CDU, or any NEXT and PREVIOUS pistons on the console (including any “regular” pistons that have been configured by the organbuilder or organist to serve this alternate function when the piston sequencer is in use), to step through the pistons in order. Note that you can use the knob to scroll through the list, a convenience when practicing. Scrolling with the knob will not activate pistons.
5. Press the BACK button *twice* and then the HOME button when you want to return to the Home Screen. You can press the Piston Sequencer button to extinguish the red LED and disable NEXT and PREVIOUS pistons if you wish.



## APPENDING PISTONS TO THE END OF AN EXISTING PISTON SEQUENCE

After choosing a sequence as explained in steps 1-4 of the section above called “Selecting an existing piston sequence by name”...

1. Press the MENU button. This will display a screen with a list of options.
2. Turn the knob to select “>Append”, then press the ENTER button.
3. Press pistons in the desired order to extend your sequence as required. You can play the organ and add pistons to the list in “real time” if you wish.
4. Press the DONE button when you are finished. This will display a list of options to play or modify the list you’ve just appended. You can then press the BACK button to display information about the piston sequence and the HOME button to return to the Home Screen.



## INSERTING PISTONS INTO THE MIDDLE OF AN EXISTING SEQUENCE

After choosing a sequence as explained in steps 1-4 of the section above called “Selecting an existing piston sequence by name”...

1. Press the MENU button. This will display a screen with a list of options.
2. Turn the knob to select “>Insert”, then press the ENTER button.
3. Use the knob to scroll to the existing piston that you want to insert your new pistons *after*.
4. Press pistons you wish to insert into your sequence as required. You can play the organ and add pistons to the list in “real time” if you wish.
5. Press the DONE button when you are finished. This will display a list of options to play or modify the list you’ve just appended. You can press the BACK button to display information about the piston sequence and then the HOME button to return to the Home Screen.



## REPLACING PISTONS WITHIN AN EXISTING PISTON SEQUENCE

After choosing a sequence as explained in steps 1-4 of the section above called “Selecting an existing piston sequence by name”...

1. Press the MENU button. This will display a screen with a list of options.
2. Turn the knob to select “>Replace”, then press the ENTER button.
3. Turn the knob to select the piston within the list that you want to replace.
4. Press the piston you want to insert in place of the one you've selected.
5. Press the DONE button when you are finished. This will display a list of options to play or further modify the list you've just modified. You can then press the BACK button to display information about the piston sequence, and then the HOME button to return to the Home Screen.



## DELETING (REMOVING) PISTONS FROM A PISTON SEQUENCE

After choosing a sequence as explained in steps 1-4 of the section above called “Selecting an existing piston sequence by name”...

1. Press the MENU button. This will display a screen with a list of options.
2. Turn the knob to select “>Delete”, then press the ENTER button.
3. Turn the knob to select the piston that you want to delete from the list.
4. Press the DELETE button.
5. Press the DONE button when you are finished. This will display a list of options to play or further modify the list you’ve just modified. You can press the BACK button to display information about the piston sequence and then the HOME button to return to the Home Screen.



## CHANGING THE MEMORY LEVEL WITHIN YOUR ORGANIST FOLDER WHILE WORKING WITH THE PISTON SEQUENCER

After choosing a sequence as explained in steps 1-4 of the section above called “Selecting an existing piston sequence by name”...

1. Press the MENU button. This will display a screen with a list of options.
2. Turn the knob to select “>Change memory level”, then press the ENTER button. This will display a screen that prompts you to select a memory level.
3. Turn the knob until the desired memory level number is displayed, then press the OK button. This will display the list where you may select Append, Insert, Replace, etc. Note: If you select one of these choices, press the ENTER button, and then press pistons to modify the piston sequence, the new memory level number that you have selected will appear after each piston name in parentheses.



## THE EUROPEAN PISTON SEQUENCER

The ICS-4000 can be optionally configured by Peterson or your Organ Builder to have a “European” Piston Sequencer instead of the more popular “American/ Programmable” Piston Sequencer which is described elsewhere in this manual. The difference is that the European “PSQ” steps through all general pistons in order as the NEXT piston or button is pressed, whereas in the American/ Programmable PSQ, pressing NEXT advances through a piston list created by the organist and which may include virtually any piston types. The organ’s config software must be set for one or the other of these PSQ types.

From the Home Screen...

1. Press the MENU button, then turn the knob to select “>Piston sequencer menu”. Press the ENTER button.
2. Press the button labeled “Piston Sequencer” so that the red LED latches on.
3. Press any NEXT piston on the console or the button labeled NEXT on the CDU to activate the first General piston. If at any time you press a general piston manually, pressing a NEXT button or piston will then activate the next general piston in numerical order. If the highest numbered general piston on the console is already displayed, pressing a NEXT button or piston will “wrap around” and general piston number 1 will be activated. Pressing a button or piston labeled “PREVIOUS” will activate the next lower-numbered general piston or wrap around in the same manner.

