# Installing updates to the ICS-4000 that have been sent as attachments to an email message

Various digital software files can be sent as email attachments from the Peterson factory, transferred from a computer with Internet access onto a USB Flash Drive memory stick, then copied into an organ's ICS-4000 control system through the organ's USB port. This document explains the procedure, including the method for "saving" the piston registrations, crescendo and tutti settings, and most other settings that all organists have made so that data can be "restored" back into the ICS after all software updates have been completed. Note that under rare circumstances, such as when the configuration of stops, pistons, or some other characteristics of the organ's spec are being substantially altered, the manual re-setting of some organist registrations may be unavoidable. Please consult with Peterson customer service in cases where it is extremely important to preserve existing organist's settings.

# Flash Drive memory sticks

We recommend that you use the USB Flash Drive memory stick that was provided by Peterson with the original ICS-4000, or a USB memory stick with a capacity no larger than 4 GB (gigabytes). If the memory stick you will be using already has software files on it (which can be seen by plugging the stick into an ordinary computer), then create a folder on the memory stick and move those files to the new folder. Most but not all brands of USB Flash Drive memory sticks are supported. Peterson can provide a list of supported memory sticks upon request.

# File types you may encounter

The new files you receive from Peterson may include any of several types which are identified by the filename extension. The main file types you are likely to encounter, and their uses, are as follows:

Filename.cfg: A "configuration" or "config" file that determines a particular organ's specification.

Filename.**H12**: A "satellite micro" file that may be used to update the Satellite Microprocessor boards found in each Satellite Cage.

Filename.**340**: An "Application" or "340 Code" file, which can be thought of as the ICS-4000's operating system.

Filename.**ALL**: A "Dot All" file, which contains data for combination action piston registrations for all organist folders; crescendo registrations; tutti registrations; and many similar types of organist settings. Files of type ".ALL" generally originate at the installation site rather than at the Peterson factory, but may be included as attachments to emails sent from the factory if Peterson staff have been asked to help preserve that data.

Filename.**pdf**: Not an ICS-specific file type, these are computer industry-standard "PDF" documents, usually scanned drawings such as wiring charts or system layout drawings. Peterson intends for these to be viewed on, and printed from, a regular computer and NOT saved to a flash drive for loading into the ICS-4000. If you receive files with this

filename extension as attachments from Peterson, please either do not save them to the same flash drive that will be used to transfer files into the ICS, or else place them in a file folder that you create for the purpose of separating them from the other files. This is important since the long file names we typically use to identify the drawings can disrupt the loading of other files.

## **Preparing to transfer files**

Copy all of the attached files from the e-mail to the USB memory stick now. This is usually accomplished through the following steps:

- -Insert the Flash Drive memory stick into the USB port of the computer where you are viewing the email message.
- -Right click on the attached file that you want to copy.
- -Select "Save As".
- -Browse to, or type into the "Save In" browser window, the drive letter for the USB port into which the memory stick is inserted.
- -Left click "Save".
- -Click the icon on your computer called "Safely Remove USB Mass Storage Device: Drive E" or similar, if applicable, before removing the Flash Drive memory stick from your computer.

Now take the memory stick over to the organ console and insert it into the ICS system's USB port. Turn the organ power on if it is not already powered up.

#### Saving organist settings/ registrations as a ".ALL" (dot ALL) file

If the organ has been in use and it is desirable for existing registrations to be preserved, you can save most combination action-related data to the memory stick as follows:

- From the Home Screen on the CDU, press the button labeled "MENU" located in the lower left corner of the screen.
- Turn the knob counter clockwise to scroll down to Supervisor mode, then press ENTER.
- -Enter the password, which has an original factory default of ABCD, using the knob and LEFT/ RIGHT buttons. If you do not know the current password, please contact Peterson Customer Service at 800-341-3311 for assistance.
- -Press the button labeled DONE.
- -Use the knob to scroll down to "Save All CA Data", then press ENTER.
- -This screen will now appear in the CDU window:

No files of type ALL Press NEW or BACK.

- -Press the button labeled "NEW".
- -Enter a new file name, using the knob and the LEFT/ RIGHT buttons. The file name must start with a letter, and can be a mix of letters and numbers up to eight characters in length. An example name would be "A" and the date: A101511. The ICS will automatically append a ".ALL" filename extension to this file, making it: A101511.ALL.
- -Press the button labeled DONE to start the saving process.
- -After the save is complete, the ICS will reboot and return to the Home screen.

## Verifying that files are present on the USB memory stick.

Before continuing the update, verify that the necessary files were successfully transferred to the USB memory stick, as follows:

- -From the Home screen, press the button labeled "Menu", then use the knob to make the following selections:
- -At Disk utilities, press ENTER.
- -At File Options, press ENTER.
- -At Rename File, press ENTER.

This action will pull up a directory of the files on your USB memory stick.

- -Using the knob, find the files that were transferred from the e-mail. There will be a .cfg file, a .H12, file, and if a larger application update is needed, a .340 file. If the CA data was saved, a .ALL file will also be present.
- -Press the BACK button (three times) and then the HOME button to return to the Home screen.

If any of the expected files are missing, repeat the process of saving files from the e-mail. If the CA registration was saved, but the .ALL file is not found, go back to the Home screen and repeat the saving of the combination action registration data. If the saving file problem persists, do not continue with the update. Telephone Peterson (800-341-3311), or reply back to the e-mail you were sent from Peterson for assistance. Do not update the ICS code files. Please note: The organ will not have changed and should still be playable.

### **Updating the Organ.**

-From the Home screen on the CDU, press the Menu button located in the lower left corner.

- -Using the knob, scroll down to "Organ builder menu" and press the button labeled ENTER.
- -Enter the password, which has an original factory default of "BLDR", using the knob and the LEFT/ RIGHT buttons. If you do not know the current password, please contact Peterson Customer Service at 800-341-3311 for assistance.
- -Press the button labeled DONE.
- -Scroll down to System Program Mode and press ENTER.
- -At Download Utility, press ENTER.
- -Press the button labeled "No" at "Load New Software. Automatically Save Organist Settings?" (This is because your organist settings have already been saved into the .ALL file through the optional procedure you followed above).
- -If this is a configuration change, scroll down to "340 configuration". Press ENTER. The .cfg code file sent in the e-mail will appear in the CDU window. Press LOAD. Please note: when loading a .cfg file, the flash drive must have both .cfg and .H12 files on it. If the .H12 file is not present, the loading process will be interrupted, an error message will appear, and the organ will not be playable until an .H12 file is provided via a flash drive and loaded into the system.
- -If this is an application code (ICS operating system) update, scroll to "340 code". Press ENTER. The .340 code file sent in the e-mail will appear in the CDU window. Press LOAD. The update process will load the .340 file and then automatically load a .cfg file if it finds one on the memory stick. If no file of type .cfg is found on the stick, a prompt will appear in the CDU window. The ICS system requires a valid .cfg file to be loaded in order to run properly. Please note: when loading a .340 file, the flash drive must have .340, .cfg, and .H12 files on it. If the .cfg or .H12 file is not present, the loading process will be interrupted, an error message will appear, and the organ will not be playable until the missing .cfg file and/or .H12 file is provided via a flash drive and loaded into the ICS system.

If you should have any difficulty, please contact Peterson Customer Service at 1-800-341-3311.

After the update is complete, the ICS will automatically reboot and then return to the Home screen.

# Restoring a ".ALL" file of organist registration data.

- -From the Home screen on the CDU, press the button labeled "Menu" which is located in the lower left corner.
- -Using the knob, scroll down to "Supervisor mode" and press ENTER.
- -Enter the password, which has an original factory default of "ABCD", using the knob and the LEFT/ RIGHT buttons. If you do not know the current password, please contact Peterson Customer Service at 800-341-3311 for assistance

- -Press the button labeled DONE.
- -Scroll down to "Restore All CA Data" and press ENTER.
- -The name of the .ALL file that was saved will appear on the CDU screen. Press LOAD.
- -After the combination action-related registration are reloaded, the ICS will automatically reboot and return to the Home screen.
- -The organ's file update is now complete.