

## Here are instructions for downloading and installing the latest version of firmware for your CMK-3 keyboards.

- 1) Download and install the latest version of CMKConfig (Version 3.4.4). Get it here:  
[http://www.organworks.com/index.php/products/software?set\\_article=cmkconfig](http://www.organworks.com/index.php/products/software?set_article=cmkconfig)
- 2) Disconnect all cables from the keyboard you want to upgrade - both MIDI, USB and power. Make a note (or label) all cables so you can put them back as they were when you have finished.
- 3) Plug in the USB cable to your PC, and the other end into your keyboard. The green Heartbeat LED should flash slowly, and the red USB LED should be lit. Connect a MIDI cable (loop) between one of the MIDI-Out connectors, and the MIDI-In Connector on your keyboard.
- 4) Start CMKConfig2x. You should see the "splash" window - indicating you are running V3.4.4. If it shows V4.4.3 or earlier, try un-installing the earlier version, then re-install V3.4.4 (just downloaded).
- 5) Then click on "Load Current Settings from CMK". This will bring up the "Set up MIDI ports:" window. If not already displayed, choose "CLASSIC ORGAN CMK" for both MIDI In and MIDI Out. Click OK. (If "CLASSIC ORGAN CMK" is not shown, check your USB cable to the keyboard, or shut down and re-start CMKConfig2x.
- 6) CMKConfig will find your keyboard and download the configuration from it. It will display one keyboard with either 20 or 24 pistons, which should match the keyboard you have. Double click on the keys. This will bring up the "Manual #1" window. Click on the General Settings tab. Then click on the "Firmware Version" button. Write down the contents of this window for future reference. Note Version, ConfigId, and Date. This is your keyboard's current software version. Close the window. Cancel the "Manual #1" window.
- 7) Click on "Save File" Enter a filename - say "Great\_old", then click on the Save button. You can now click on Open File to see where the "Great\_old.cmk" file was saved. Make a note of the file's location. Now close CMKConfig2x.
- 8) Download the firmware file for your keyboard - either the 20 or 24-piston version (from the same web page as CMKConfig; link above). Make a note of where your browser has saved it. This file does not have to be installed. Just click on it when you want to run it.

- 9) Unplug one end of the USB cable. Now click on the Firmware Loader file - either "CMK3-v3.8.FIRMWARE.LOADER.exe" (for 20-piston keyboards); or "CMK3\_24-v3.12.FIRMWARE.LOADER.exe" (for 24-piston keyboards). It should show "Device not detected / Could not find device". Click on the "Instructions" button, and read the instructions. (You can expand the box.)
  
- 10) Now plug in the USB cable, while holding down the top three white keys. The green Heartbeat LED will flash rapidly, and then slow down. Now click on the "Load into CMK" button. The new firmware will be sent to the CMK keyboard and installed in a few seconds! When complete, the window will show: "Erase / Program / Verify Completed Successfully". Now close the Loader window. If it did not complete successfully, go back and repeat steps 9 & 10.
  
- 11) Unplug the USB cable, wait a few seconds, the plug it back in. Start CMKConfig2x. Click on "Load Current Settings from the CMK". When the picture of the keyboard shows up, click on the keys. Click on the "General Settings" tab, then on the "Firmware Version" button. The Version window should show the new firmware info - i.e. "Version: 3.8, ConfigId: 0x13, Date: 2018/04/27" for a 20-piston keyboard, or "Version: 3.12, ConfigId: 0x14, Date: 2018/04/27" for a 24-piston keyboard. Close the Version window, and Cancel the "Manual #1" window. If the Version info was not correct, click on "Load Current Settings from the CMK" again, and then check the Firmware Version info again.
  
- 12) Now restore the original configuration you saved in step 7 above. Click on "Open File". Select the file previously saved - say "Great\_old.cmk". Now click on "Write to CMK".
  
- 13) You can now explore new options, and use CMKConfig2x to make changes to the keyboard's configuration. For example, on the "Special Settings" tab (after you click on the keyboard), you will see a box labeled: "KeySensing Configuration". This allows you to specify which contacts the keyboard will use. The Normal setting is the only one which allows velocity mode. It will sense the key after both contacts have closed, and release when both are open. The other modes allow you to use the upper contacts only, the lower contacts only, or even "Upper-Lower" which keys when the upper contact closes, but releases when the lower contact opens.
  
- 14) When you have completed any changes, and written the changes to the CMK keyboard, you should probably also save the configuration to a file, for backup. Then close CMKConfig2x and unplug the USB cable and the "loop" MIDI cable, and reconnect the cables as they were when you started. Then test with Hauptwerk. Only then, continue with your other keyboards.

Questions or comments: email [midiworks@organworks.com](mailto:midiworks@organworks.com)