There are 3 methods of upgrading instrument software for the CPC4000 / CPC6050 / CPC3050, as follows:

- Method 1: Load .gz file directly from USB drive to instrument.
- Method 2: Using Ethernet from PC using "Ethernet_Installer" program.
- Method 3: Using Serial (RS-232) or USB from PC using "Serial_Installer" program.

Method 1: USB Drive Software Installer

The CPC4000, CPC6050, and CPC3050 may be updated via a USB drive connected to one of the USB ports. Copy the necessary file to the root directory of a USB drive:
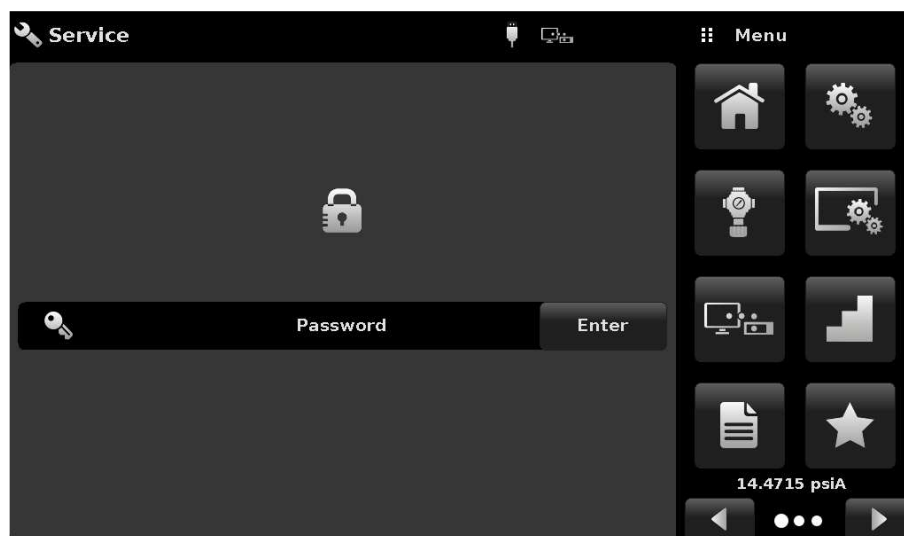For CPC4000 --
\\files\cpc4000-MMmmtt.gz
For CPC6050 --
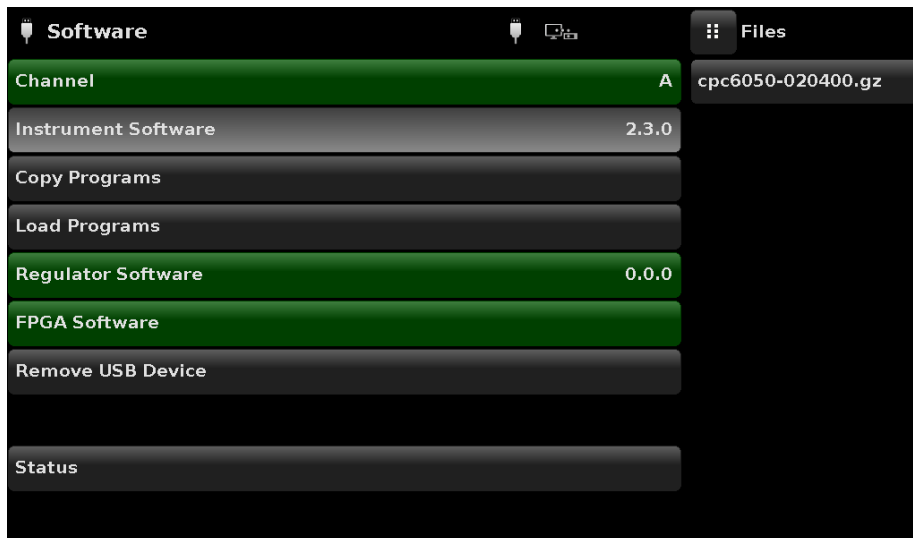\\files\cpc6050-MMmmtt.gz
For CPC3050 --
\\files\cpc3050-MMmmtt.gz
Where MMmmtt specify the major, minor, and test version number of the instrument software to be installed.

Step 1: Insert USB drive into instrument. A USB icon will appear at the top of the screen.

Step2: Tap on the USB icon that appeared. Select "instrument software" from the list. The .gz file copied to the USB drive will appear in a selection on the right-hand side.
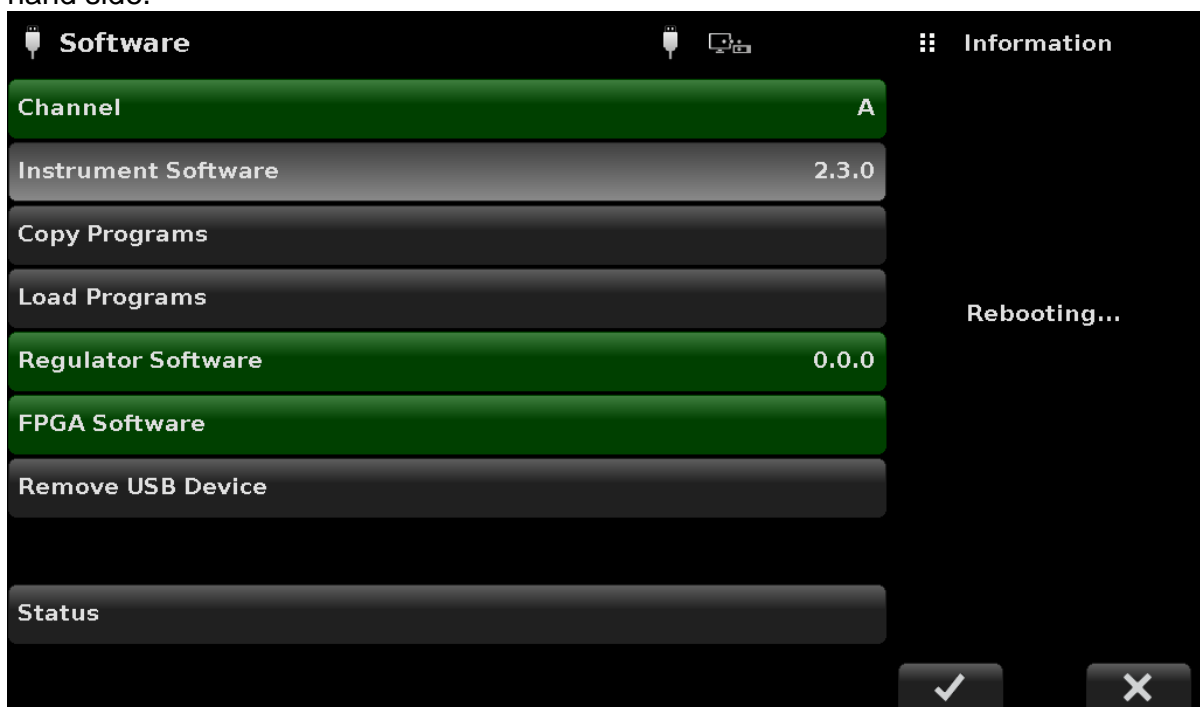
Step3: Tap the .gz file and wait for the file to be copied, and the instrument to reboot.

Method 2: Ethernet Software Installer

The Ethernet Software Installer application (Ethernet_Installer.exe) runs on Windows computers from Windows95 to Windows 10. It is used to install software on CPG2500's, CPC8000's, CPC4000's, CPC6050's, and CPC3050's.

This program requires two sub-directories: *files* and *packages.*

The *files* directory contains gzipped instrument application programs and drivers. These compressed files have the version information encoded in the file name: name-MMmmtt.gz where MM = major number, mm = minor number, and tt = test number (should be 00 for released software).

The *packages* directory contains Windows .ini compatible text files that associate instrument application programs and the correct drivers. The package files have the instrument model and the release date encoded in the file name: model-YYMMDD.pkg. Note the non-standard date encoding.

Installing the program
Change the file extension to .zip
Unzip the file to the directory of your choice

Using the installer

! Contact your network administrator before connecting the instrument to your corporate network!

Connect your instrument and computer together using a standard Ethernet cable. Turn on the instrument and set the IP address to an address on your network. If you are working with a CPC4000, CPC6050, or CPC3050, DHCP can be used to automatically get an IP address. Ping can be used from the host computer to check for proper connection. Some firewalls may block the default 49405 port.

Start the application, choose your language, and enter the IP address and Port number in the boxes provided. Then press the Connect button.

If the instrument is found, the status bar will read 'connected' and the package choices are limited to the model of instrument you are working with. Verify that the package versions described in the left pane are the versions you want to install. Press 'install packages' and wait for completion.

Method 3: Serial / USB Software Installer

Note! Compatibility to use the serial installer was not added until instrument software v2.51.0. If upgrading from a version before this, a different method of upgrade must be used!

The serial installer application (Serial_Installer.exe) works much in the same way as the Ethernet installer. For file structure, see Method 2 above.

After running the serial installer, choose the COM port, and set the instrument's baud rate to 57600. Then press "Connect". Upon successful connection, choose the software package to install, and press "Install package".

The serial installer also allows being run in an automated fashion, using optional command line arguments.

Instructions for installing software using serial installer's command line:

Command line arguments:

-AUTO   Automatic install. Runs program without GUI interface. Must provide com port with -PORT. If baud rate is not specified, uses 57600. If package file is not specified, uses latest version available from \packages directory.

-CONSOLE   During runtime, a separate console window will appear with status messages from the program. May be useful for feedback while running with -AUTO.

-PORT=COM# Specify com port to be used. Only used with -AUTO functionality. Program only supports COM1 to COM16.

-BAUD   Specify baud rate to be used. Only used with -AUTO functionality. Programs supports 9600, 19200, 38400, 57600, and 115200. Ensure the instrument baud rate matches this value.

-PKG=ssssss-dddddd   Specify package file to be loaded. Only used with -AUTO functionality. Package file must match a filename within the program's packages/ directory. Including the ".pkg" file extension is optional.

Program return value after completion:
0 : Success.
-1 : Main GUI window unable to start.
-2 : Invalid command line argument.
-3 : No package file found.
-4 : Com port settings not found.
-5 : Unable to connect to instrument.

In Windows,

1. Put the installer program and the associated files in a directory on your computer, i.e. in C:\CPC6050 Software\
2. Run cmd.exe
3. Go to the directory where the installer program is located, i.e.

cd C:\CPC6050 Software\

4. Run installer with desired arguments, i.e.

serial_installer -AUTO -CONSOLE -PORT=COM1 -BAUD=57600 -PKG=cpc6050-201104

5. Wait for instrument to reboot and the console to display "Done!"

   Example output from console//

```
Program Entry @ C:\CPC6050 Software\Serial_Installer.exe
Arg1: -AUTO
Arg2: -CONSOLE
Arg3: -PORT=COM1
Arg4: -BAUD=57600
Arg5: -PKG=cpc6050-201104

Found package "packages\cpc6050-201104.pkg" ...
 Connecting ...
Connected to COM1 baud 57600 successfully ...
 Getting package ...
 Waiting for installer to connect ...
 Getting file ...
Using file as specified : files\cpc6050-025100.gz
 Sending file ...
Transfer 0.00%
 Transfer 0.00%
 Transfer 0.00%
 Transfer 0.84%
 Transfer 1.68%
 Transfer 2.52%
 Transfer 3.36%
 …
 Transfer 97.45%
 Transfer 98.29%
 Transfer 99.13%
 Transfer 99.97%
 Transfer 100.00%
 Transfer 100.00%
 Getting next file ...
 Rebooting instrument ...
 Reconnecting ...
 Done!
```

First boot up with new software installation

After successfully upgrading your instrument, it is recommended to Default the stored settings and re-configure your instrument. The Default button is located in the Settings application under the Configuration button.

Settings		Configuration
Language	English (US)	Configuration 1
Brightness	70%	Configuration 2
Volume	Off	Configuration 3
User 1 base units	psi	Configuration 4
User 1 multiplier	x 1.100000	
User 2 base units	psi	Load
User 2 multiplier	x 1.000000	
		Save
Instrument Mode	A and Delta	
Configuration		Default

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