

Upgrading to UPC Studio

Application Note

Quick instructions on upgrading your Pacific Power Source!



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Upgrade your Pacific AC Power Source to the latest firmware (version 5.0 or later) to enjoy the advantages of Pacific's new UPC Studio Software Suite!

Key Features of UPC Studio

- Monitor power source status and preview power source Output Sequences
- Create arbitrary waveforms via Import, Harmonic entry, or Freehand draw
- Connect to a virtual UPC using simulation files and update settings offline
- Capture and record commands and queries sent to your UPC
- Create and execute output sequences based on time or cycle variations of voltage or frequency
- View, print, save and/or export .csv files of UPC metered values and settings

The firmware upgrade requires replacement of the EPROM's in your UPC Controller. The EPROM replacement may be performed in the field by qualified operators, or by returning your power source to the factory.

With the UPC Manager Utility (included with UPC Studio), all programs, waveforms, and configurations stored on your UPC can be copied and restored prior to changing the EPROMS. This process will provide you a backup of your UPC's information for later retrieval.

Obtaining UPC firmware upgrade:

The fastest way to upgrade your UPC is to contact the Pacific Power Source factory or authorized service center for an upgrade kit. The kit will include detailed instructions on how to upgrade your UPC's firmware. You will need to provide your product's model number, serial number, any installed modifications, and the firmware part number and version (press 'fn, 3, 3' on the front panel of your UPC). You can contact the factory at +1-949-251-1800 or via email at support@pacificpower.com.

Get more out of your AC Power Source with added features:

As a part of your firmware upgrade there are a couple of options for you to consider. (Please note that if you had previously purchased these options they will be included in your upgrade for no additional charge.) UPC Studio will automatically recognize these features when they are installed in your UPC controller.

For a small added cost you add one or more of the following features to your firmware upgrade:

- **Harmonic Analysis and Synthesis (HAS)** – provides a quick report on the voltage and current waveform harmonics on the output of the AC power source up to the 51st harmonic. The measured harmonic values are presented in UPC Studio in either a bar chart or spreadsheet style. Limit values can be applied to quickly confirm compliance to your requirements.
- **Programmable Output Impedance (Prog-Z)** – dynamically compensates for output transformer or line distribution losses. Control and configuration are easily accessed in UPC Studio's main control panel.
- **Current Protection (M99213)** – Allows you to set a time limit for the programmable current limit. In some cases you may need to control how long an overload condition may occur. High inrushes of current may be needed to start a particular load, but could be damaging over prolonged periods of time. Current Protection allows you to set a time limit to the programmed current limit feature of the UPC controller. All Current Protection settings are quickly accessible via the UPC Studio control panel.

UPC Studio will be included with all programmable UPC controller shipped after March 1, 2007. All units shipped to our factory or UK service center will receive a firmware upgrade as a part of any service or calibration. All UPC32/12 and UPC3/1 programmable controllers with firmware earlier than version 5.0 may be upgraded by exchanging the EPROMs inside the controller.

Upgrade costs are as follows for units not sent in for service or calibration:

Description	Cost
UPC Studio Upgrade Kit (includes 5.0 firmware, new UPC Manual, Upgrade instructions, and installation disk)	\$500.00
Add HAS to Upgrade Kit*	\$400.00
Add Prog-Z to Upgrade Kit*	\$550.00
Add M99213 to Upgrade Kit*	\$500.00

*Note: If your original firmware included these options they will be provided as a part of the upgraded firmware and do not need to be purchased again.

UPC Studio Registration:

To enable communication to your Pacific AC power source with UPC Studio you will need to register the software with Pacific Power Source. Upon boot up of your UPC with your new firmware a serial number will be displayed momentarily. You will need to record this to register your UPC Studio. Pacific will issue an unlock code once we receive your serial number to enable communication between UPC Studio and your AC Power Source. An unregistered version of UPC Studio can operate in simulation mode without an AC Power Source present.

*For further detail on Pacific's UPC Studio or upgrade information please write or call: **800-854-2433 (USA only) or +1-949-251-1800, or email sales@pacificpower.com.***