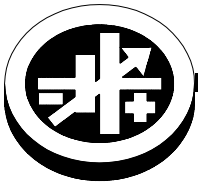


# INSTRUCTION SHEET



**KEPCO** An ISO 9001 Company.

## Firmware Upgrade

### FIRMWARE UPGRADE UTILITY

#### I — INTRODUCTION

**SCOPE OF MANUAL.** This Instruction Sheet covers the installation and use of Kepco's Firmware Upgrade Utility.

**DESCRIPTION.** The Kepco Firmware Upgrade Utility allows selected Kepco products to be upgraded to the latest Firmware without replacing any parts. The Firmware Upgrade Utility is available from the Kepco web site at

[www.kepcopower.com/utilities/util.htm](http://www.kepcopower.com/utilities/util.htm)

**NOTE:** Check the web page referenced above to verify that your Kepco product and/or Firmware version is 1) eligible to use this method to upgrade the firmware and 2) note any requirements for the port used to perform the upgrade.

#### II — INSTALLATION

1. Download and open the zip file from [www.kepcopower.com/utilities/util.htm](http://www.kepcopower.com/utilities/util.htm)
2. Run the file called setup and follow the instructions to install the program on your PC. The upgrade utility is self-contained and does not require VISA to be installed on your PC.
3. Installing the Firmware Upgrade utility accomplishes:
  - Start Menu updated with KEPCO folder and UTILITIES subfolder.
  - Program Files Folder updated with KEPCO subfolder and UTILITIES sub-subfolder containing all files required for upgrade, including a runtime executable for CVI that performs the upgrade without affecting prior installations of CVI.
4. Verify communication between the power supply and PC using either the RS 232, GPIB (IEEE 488) or LAN bus.

#### III — OPERATION

After the Firmware Upgrade Utility has been installed, proceed as follows:

1. At your PC go to Start - Programs - Kepco - Utilities - Firmware Upgraded to run the Firmware Upgrade Utility.
2. At the top menu bar, click **Bus Selection** (see Figure 1) and choose RS 232, IEEE 488 (GPIB) or LAN as the interface bus to use during the upgrade process.
3. Depending on the bus selected, enter the following
  - a. RS 232: Select applicable **COM Port** and **Baud Rate** (see Figure 1).

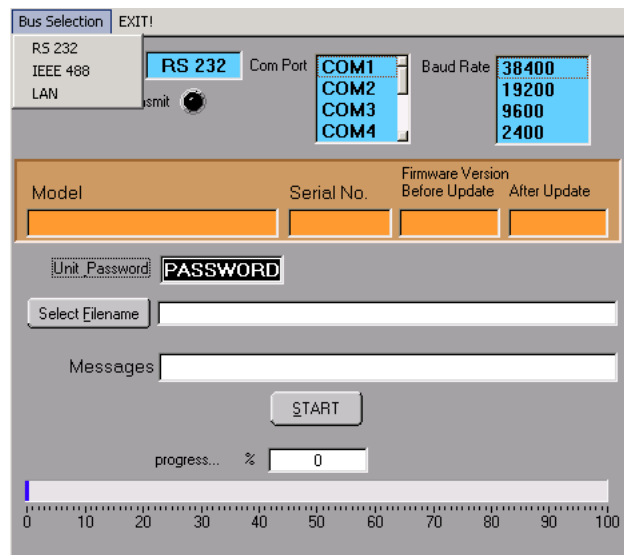


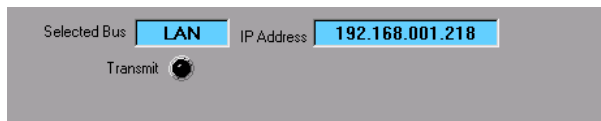
FIGURE 1. OPENING SCREEN, RS 232 SELECTED

- b. IEEE 488: Select applicable **GPIB board** and **GPIB address** of the power supply (Figure 2).



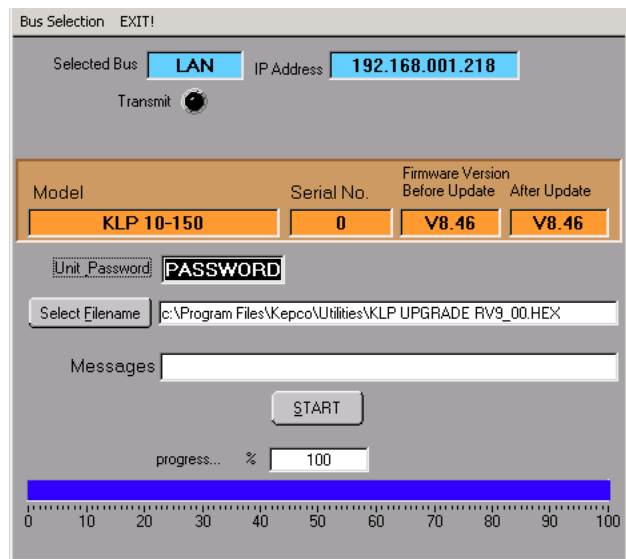
**FIGURE 2. GPIB (IEEE 488) SELECTED**

- c. LAN: Enter applicable **IP Address** of the power supply (see Figure 3).



**FIGURE 3. LAN SELECTED**

9. When **Firmware Version After Update** shows the new firmware version and the **% Progress** indicators show 100%, the update is complete.



**FIGURE 4. UPGRADE COMPLETE**

- Enter the power supply password in the **Unit Password** field.
- Click **Select Filename** to locate and select the firmware code file (e.g., klpupgrade V9\_00.hex).
- Click **Start**. The **Model**, **Serial No.** and **Firmware Version Before Update** are displayed. The **Messages** box displays *Erasing* to indicate the upgrade has started. If an error message is displayed (e.g., wrong password, device not found, etc.) correct the problem and click **Start** again. If unable to correct the problem, contact Kepco.
- As the upgrade progresses, the **Transmit** indicator lights periodically when data is being transmitted from the PC to the power supply, and **% progress** is indicated both numerically and graphically.
- When the upgrade is near completion, the message *Powering Up* will be displayed.

- Click **EXIT!** at the top menu bar to exit the upgrade utility.
- Download documentation applicable to the new firmware revision from the Kepco website at [www.kepcopower.com/support/opmals.htm](http://www.kepcopower.com/support/opmals.htm).
- For a brief list of differences between the old firmware and the upgraded firmware, refer to the readme.txt file included with the Firmware Upgrade utility.