

## Upgrading the Firmware on a Citizen CLP 9000 and CLP 8000 series Printer

**What is firmware?** Firmware is a piece of computer software (ie. a program) that is semi-permanently recorded in the hardware of your printer (but can be overwritten when necessary).

**Why Upgrade?** Because occasionally the printer manufacturer may discover small errors in the firmware program or may further develop it to improve the performance of the printer.

**How to Upgrade** Follow the simple steps below.

- If the firmware file you received is contained in a ZIP file, first you will need to extract it and copy it somewhere on your C: drive (in an easy to access location, ie. a folder at the root level). NB: The firmware file will usually be titled xxx.S or xxx.sn (where *n* is a number). Save this file in to an easy-to-access DOS directory
- Power OFF the printer the switch back ON whilst holding in the **EXIT** and **DOWN** keys (bottom left & middle right buttons) for about 3 seconds.

- The printer will display

```
IPL      v1.x  
Start?
```

- Next, press the **SELECT** key (bottom right button)

- The panel will display

```
DOWNLOAD  
WAIT
```

- Open a DOS window on the computer and at the DOS prompt, type
  - `COPY filename printerport`
  - Where *filename* is the name (including location) of the firmware file you saved earlier.
  - And where *printer-port* is the port on your computer to which the printer is connected, ie. the printer is attached using a standard parallel cable this would usually be **LPT1**:
  - So, if the firmware file was called a123456.S and you saved it in a folder called C:/Citizen **and** your printer is attached to the parallel port you would type:
  - `COPY C:/Citizen/a123456.S LPT1:`
- The LCD panel will display

```
DOWNLOAD  
A0000010
```

- and the counter will advance through until it reaches a value like A0FFFFFF. This usually takes about 3 minutes. The downloading may pause from time to time during the downloading function.
- After all the data has been sent to the printer, the printer will automatically start to write the data to memory:

```
WRITING  
A0000010
```

- and the counter will advance through until it reaches a value like A01FFF00. This will take about 2 minutes.
- Finally, the printer will verify the data written to flash memory

```
VERIFING  
A0000010
```

- and the counter will advance through until it reaches a value like A01FFF00. This will take about 1 minute.
- When the upgrade is successfully completed, the message

```
IPL  
SUCCESS
```

- will be displayed together with a sound from the printer. Press **SELECT** to continue
- If a message such as

```
EEPROM  
Init?
```

- is displayed. Press **SELECT** to reset the EEPROM values to factory defaults
- The system will restart and eventually reach the READY mode of normal operation:

```
READY
```

- The upgrade is complete! Close the DOS window on you computer.

For more details, please contact [support@hibiscus-plc.com](mailto:support@hibiscus-plc.com) or your usual account manager.