

## **IJ-7100 Ink-Jet Transaction Printer**

### **Flash Programming Guide**

## **Addmaster Corporation**

Address: 225 East Huntington Drive  
Monrovia, CA 91016

Web: [www.addmaster.com](http://www.addmaster.com)  
Phone: (626) 358-2395  
FAX: (626) 358-2784

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Notices: Subject to change without notice.  
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## 1. Overview

The IJ-7100 Ink-Jet Printer uses “Flash” memory for storage. This type of memory is re-programmable and allow for a variety of customization. Typically, this customization will be accomplished by the reseller and not by the end-user. Re-programming the printer requires the use of a Host PC and a serial RS-232 connection. The process of re-programming is called “Downloading.”

The following items may be downloaded into the IJ-7100 Printer:

<i>Item</i>	<i>Notes</i>
Firmware	The printer software that controls its operation and printer emulation.
Fonts	The printer can have its entire font bit-mappings downloaded.
Logo	The printer supports Logos, which are a user customizable bit images or text. These images can be printed via a short software command or automatically at the beginning or end of print jobs.

## 2. Downloading Notes

The procedures for downloading each item are given in subsequent sections. All the procedures are similar. The procedures may be performed independently. The only dependent relationship is that Downloading Firmware will reset and clear out any previously resident Logo.

Downloading procedures and programs for accomplishing this are provided. If this functionality is to be built into another application, please study the batch files carefully and replicate as closely as possible.

For other supported versions, please contact the factory.

### 3. Downloading Firmware

**Steps:**

Follow these general steps to Program the IJ-7100.

1. Obtain required components.
2. Load IJ7000\_ISP.exe on local PC.
3. Attach Printer.
4. Download Code.
5. Test.

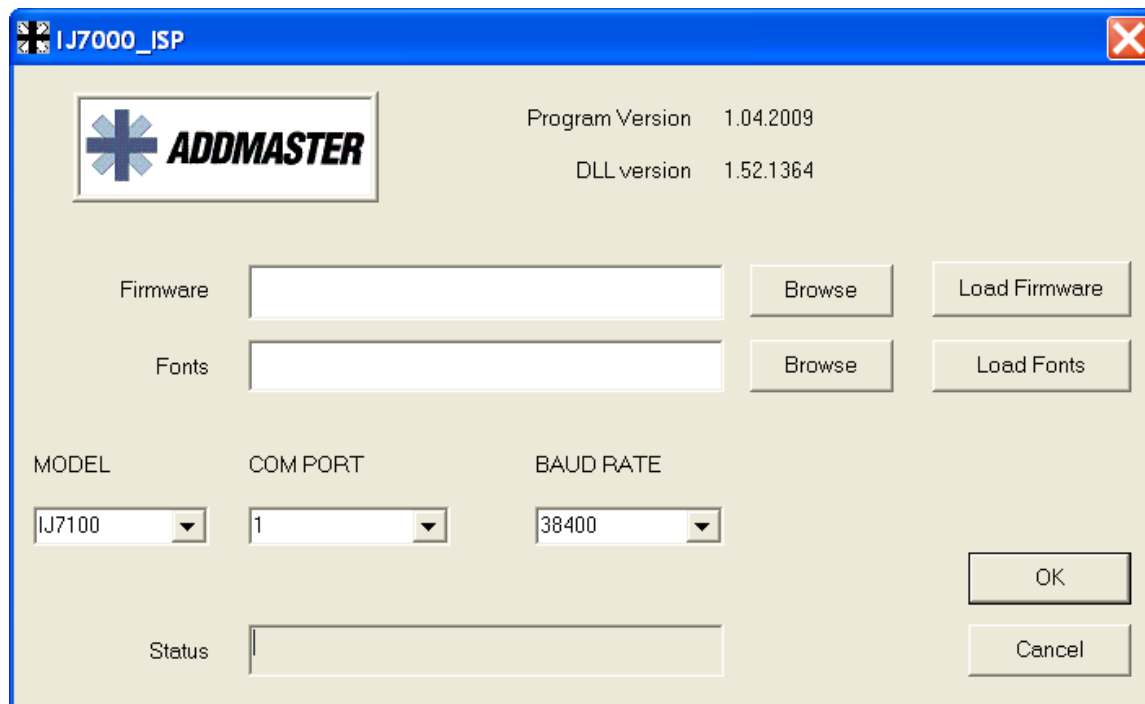
**Step 1: Required Components.**

<i>Component</i>	<i>Items Required</i>	<i>Notes</i>
Download Program	ij7000_isp.exe flashmagicarm.dll	Program file. Requires setup on PC.
Printer Firmware	xxxxx.HEX	Hex file to load.
Host Platform	PC with available COM1:	Uses COM1 for RS232 comm.
Host OS	Win2K, WinXP, Vista	
Cable	RS-232 Serial Cable	Addmaster P/N 78059

**Step 2: Load Flash Magic On PC.**

Copy the program *ij7000\_isp.exe* (and its library *flashmagicarm.dll*) to a known location on your PC. If you downloaded the programs and the two were ZIPPED together, they must be first unzipped.

Execute the program. The following screen should be displayed:



Make the proper selections for MODEL and COM PORT to suit your setup. The baud rate of 38400 is appropriate in almost all cases. In cases where download results in errors or failure to verify, try a lower baud rate.

**Step 3: Attach Printer To PC.**

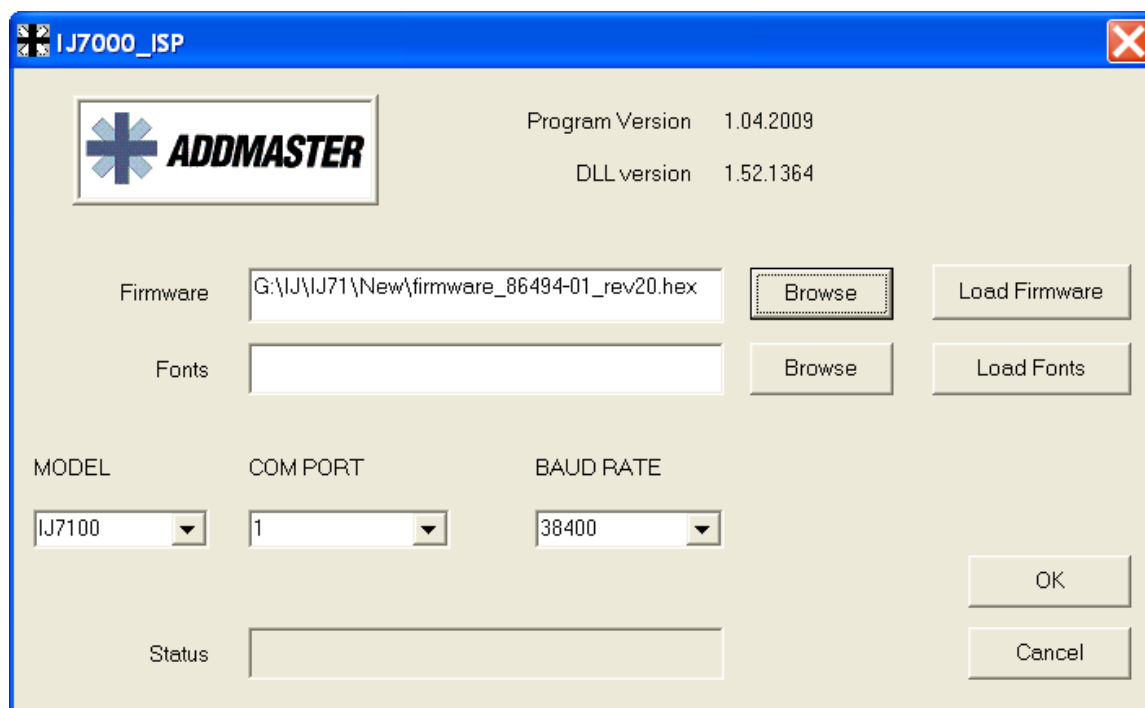
Connect the serial cable on the IJ-7100 to COM1: (or the selected COM port) on the PC. Connect the power cable. After connection, follow these steps:

- Turn off printer.
- Turn DIP Switch #1 ON. These switches are accessible at the rear of the printer.
- Turn on printer.

At this point, the STATUS indicator should be illuminated at the printer. The other indicators should be off. If so, the printer is ready.

**Step 4: Download Code.**

Use the browse button to select the firmware (or font) to be downloaded. See the example:



To program, click on the **“Load Firmware”** button. The progress of the download process will be displayed in the “Status” box.

After the firmware is downloaded, it is read back and verified. If there are errors, repeat the procedure or call the factory for technical support.

**Step 5: Test.**

The new firmware is now downloaded and should be tested.

- Turn off the printer.
- Turn DIP Switch #1 OFF.
- Turn on the printer.

To test the printer:

- Make sure journal roll paper is installed.
- Hold down the ACTION key ("1" key) until the printer begins printing its Printer Status Info message.
- Verify the new firmware's version number matches the firmware intended to be downloaded.

You're done!

## **4. Downloading Fonts**

Follow the same procedures outlined above for downloading firmware.

EXCEPTION: Select the Font file in the “Fonts” selection box. Hit “Load Fonts.”

## **5. Downloading Logos**

Follow the same procedures outlined above for downloading firmware.

EXCEPTION: Select the Logo file in the “Fonts” selection box. Hit “Load Fonts.”

## 6. Document Change History

<b>Rev.</b>	<b>Date:</b>	<b>Change:</b>
2	5-14-2009	Initial release.