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Upgrading Software Instructions for
ICC Universal Black Box (includes Prince Castle Translator Box # 980195-70

Flashing the units using FlashMagic on a PC

Document Part No. 896195-70F

Requirements

- Part# 980195-70   ICC Prince Castle Translator Box
- Part# 801104   PC-UBB Programming Adapter-DB9 FM-RJ45
- Part# 681-8x8-120   10' Cat5 Cable
- Part# 620319   12 VDC,1.25a Power Supply used on the Kitchen Minder
  With associated country specific power line cord
- Small Philips Head Screwdriver (not supplied)
- Windows Computer with a free DB9 Com port or USB-Serial Converter (not supplied)
- Flash Magic software v3.13 or higher
  o Free download: **http://www.flashmagictool.com/**
- Hex software file to flash prince Castle Translator Box See "Hex File naming Convention" below
  o ICC will e-mail you the latest Hex file or request a web link

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Hex File naming Convention

The file name: 890195_70_v301_cs71bc.hex is an example of:
890= Software
195_70 = Prince Caste Translator Box
V301 = Version 3.01 (this will change with new releases)
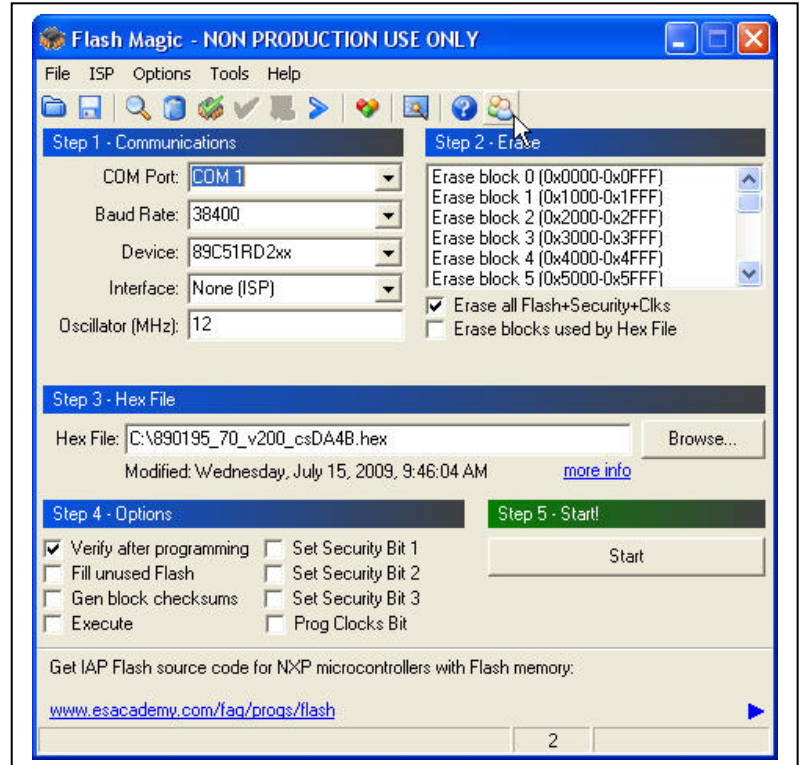Cs71bc = the version check sum (this will change with new releases)

A. Determine the Microprocessor device type in your Universal Black Box

1. Using a small Philips head screwdriver (not supplied), remove cover of PN 980195-70 Prince Castle Translator Box
2. Locate the 44-Pin PLCC microprocessor chip in the U1 location of the green printed circuit board
3. Determine whether you have one of two devices indicated on the chip under the "NXP" logo: P89CV51RD2xx or P89C51RD2xx (xx = can be any letters, numbers or blank)
4. Record this device type for use in the next section
5. Determine the PCboard rev level
   Check the marking on the top right of the PCBoard "PCB 400195x"
   The x represents the rev level of the board.
   Rev L and higher will indicate that there is a 2-pin header "JP1" located adjacent to the "NXP" chip referenced above that you will use in the next section.
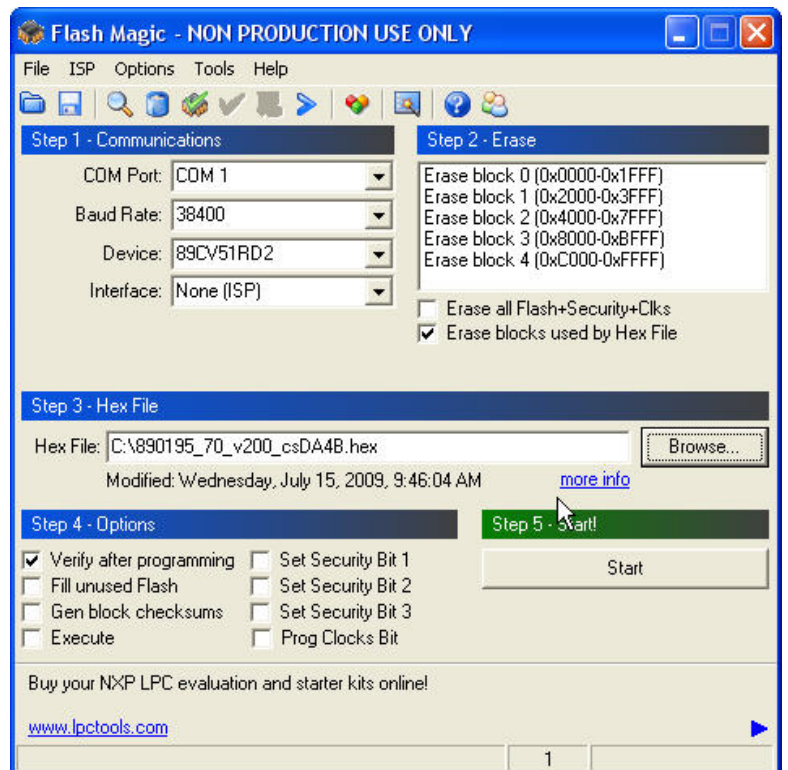
B. Flashing the Universal Black Box

1. Download the Flash Magic program from the web site referenced above and install onto a PC.
2. Download the latest Hex file from ICC.
3. Attach the adapter on to a free COM port on the PC or USB to Serial converter.
4. Attach Cat5 cable to the adapter and the port on the Translator Box marked "Kitchen Minder".
5. For PCB rev 400195K and below go to option #7 below.
6. For PCB rev 400195L and higher, locate the 2-pin header JP1
   Use a screwdriver to temporarily connect the 2-pins together while simultaneously powering the Black Box with the power supply from the Kitchen Minder to power up
   The LD1 Power light will illuminate.
   The LD2 Power light will stay unlit.
   If LD2 is flashing appx. every 1-2 seconds repeat step #6 above.
7. Start the Flash Magic application on the PC.
8. Based on which Device you have and recorded in step A4 above, set the Basic Configuration parameters as depicted below:

For Device:
89C51RDxx
xx = any numbers letters or

For Device:
89CV51RD2xx
xx = any numbers letters or

8961

6. **Click the Browse button and load the hex file supplied by ICC to flash the Translator Box**
7. **Click Start button-"Erasing device," then "Programming Device" messages should appear in lower left window.**
8. **If "Attempting to connect" message appears, then an error message with prompts, click CANCEL, check all cable connections, exit Flash Magic application on PC, go to option #5 above.**
9. **When programming is finished, remove the programming cable from the unit, reattach to the PHU(s) and Kitchen Minder and test for proper operation.**

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