

## Introduction

These procedures may be used to restore use of a DVC Master Module (DVC710, DVC707, DVC10, DVC7 or DVC5) if the modules Flash Memory has become corrupt for any reason. For example, power interruptions during a BIOS or Application Program download. The presenting symptoms include a module that will not communicate with a PC or other modules and the Module Status (MS) and Node Status (NS) indicators are off for the DVC710, DVC707 and DVC7 or are flashing green alternately at a one second interval on all other models.

Specific procedures are provided below to guide the user in recommissioning a module that has corrupted Flash memory due to a power interruption while programming etc. Use the procedure that is listed for your BIOS and/or Intella<sup>™</sup> Toolset (PLM) revision.

NOTE: In all versions, the easiest way to recover a module is to install a spare "good" module, then restart the PLM and begin the program loading sequence with the good module. When instructed to "cycle power", turn off the power and swap in the corrupted module. When power is switched back on, the module should then be in programming mode.

# **BIOS / PLM Version 5.0 and Higher**

- 1. Within the PLM, Select the DVC710 MASTER switch to open the Main DVC710 Screen. Reference Figure, 1. (Restart the PLM if needed)
- 2. Within the Main DVC10 Screen Select the Program Loader button to open the Program Loader Screen. Reference Figure, 2 and 3.
- 3. Cycle Power and wait for the unit to enter programming mode signified by the green indicator on the programming loader screen turning green and the programming buttons to be active.
- 4. If the unit was corrupted during an application download, skip to next step. If not, select the Load BIOS switch and load the DVC710/DVC707 BIOS version 5.x. Contact HCT for a daily password if needed.
- 5. When the BIOS has finished loading, select the Load Application switch and load an application. (There is no need to cycle power until after the application is loaded)
- 6. After the Application has loaded Cycle Power.







## BIOS / PLM Version 4.2 and up to version 5.0

- 1. Within the PLM, Select the DVC10 MASTER switch to open the Main DVC10 Screen. Reference Figure, 4. (Restart the PLM if needed)
- 2. Within the Main DVC10 Screen Select the Program Loader button to open the Program Loader Screen. Reference Figures, 5 and 6.
- 3. Cycle Power and wait for the unit to enter programming mode signified by the red indicator on the programming loader screen turning green and the programming buttons to be active.
- 4. If the unit was corrupted during an application download, skip to next step. If not, select the Load BIOS switch and load the DVC10 BIOS version 4.x.
- 5. When the BIOS has finished loading, select the Load Application switch and load an application.
- 6. After the Application has loaded Cycle Power.

## BIOS / PLM Version 4.0

Users may need a working DVC Module to establish RS232 communication with the Program Loader Monitor (PLM) before reprogramming an Un-Commissioned Master Module. If there is no working module available, the user may need to download and use the latest software revision release as well as the procedure for BIOS / Program Loader Monitor 4.2 and higher.

- 1. Connect the PC to a working DVC Module with the DVC using normal procedures and launch the PLM version 4.0. (Restart the PLM if needed)
- 2. When communication between the DVC and the PLM has been established, disconnect the working DVC and connect the non-working DVC.
- 3. Within the PLM, Select the DVC10 MASTER switch to open the Main DVC10 Screen. Reference Figure, 4 below.
- 4. Within the Main DVC10 Screen Select the Program Loader button to open the Program Loader Screen. Reference Figure, 5 and 6 below.
- 5. Within the Program Loader screen, select the module to be programmed from the pull down menu in the upper left hand corner of the screen. Reference Figure, 7 below.
  - a. If the Serial Label on the back of the module does not have a box with "REV B" written between the model number and the serial number, select DVC-10 on the pull down menu.
  - b. If the Serial Label on the back of the module does have a box with "REV B" written between the model number and the serial number, select DVC-10B on the pull down menu.
- 6. Cycle Power and wait for the unit to enter programming mode signified by the red indicator on the programming loader screen turning green and the programming buttons to be active.
- 7. Cycle Power again and wait for the unit to enter programming mode signified by the red indicator on the programming loader screen turning green and the programming buttons to be active.
- 8. If the unit was corrupted during an application download, skip to next step. If not, select the Load BIOS switch and load the DVC10 BIOS version 4.0.



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- 9. When the BIOS has finished loading, select the Load Application switch and load an application.
- 10. After the Application has loaded Cycle Power.
- 11. On the Main Screen, Figure 1 enter the word "victory" into the password field. The password level should change to 4.
- 12. On the Main DVC10 screen, Figure 2, select the Factory Information switch.
- 13. On the Factory Information screen in the same pull down menu as was on the Program Loader screen, select the same DVC10 model that was selected before downloading the BIOS / Program.
- 14. Select Send Changes
- 15. The unit should now be operational.

DVC Program Loader / Mo			
	DVC Not Responding	9	Quit
		Password	Level
Module DVC10 Mas DVC 50 Mrtual Display EE-MEMORY	MAC ID ter 10 Status 50 Status 64 Status	Module	MAC ID

#### Figure 4

DVC 10	
Analog / Universal Percent Volts/nA PVM Out   1 /#va_1 0 0.00 PVM Out   2 /#va_2 0 0.00 PVM Out   3 /#va_2 0 0.00 PVM Out   3 /#va_2 0 0.00 PVM Out   1 Uni_1 0 0.00 PVM Out   2 ////////////////////////////////////	tputs %DMD Current Shorted Open   p p.004 p.0004 <
PVM_1 % DMD ▼ 0.00 Graph   PVM_1 % DMD ▼ 2.63 Manual   5.00 -	B HSB OFF Main Menu Program Loader Digital Inputs State
4.00 - 3.00 - 2.00 -	Output Groups 2 Dig.2 OFF   Analog Inputs 3 Dig.2 OFF   Model 00.4 OFF OFF   V/D Functions 5 Dig.5 OFF
1.00- 0.00-	Factory Info P P/92.0 ON   Export to File 7 Pig_27 OFF   Inig_8 0 0 0

### Figure 5



#### Figure 6



#### Figure 7