NUM 10xx and Axium Power CNC	**NUM INFORMATION** **US N° 114** **1/3**	**Date: 10/10/05** **NUMBackUp F2**

NUM 10xx Series CNC Backup/ Restore Procedures Using NUMBackUp

Scope: The NUM 10xx and Axium Power Series CNC system has essential application specific files stored in various locations within the system. **(See US117 – 10xx Series System Memory Map.)** It is important to periodically backup this system memory to prepare for data loss due to system failures.

The purpose of this document is to provide the user with a detailed step-by-step procedure for setting up the RS-232 communication link from the PC to the CNC and downloading/uploading the individual files necessary for a backup/restoration of the CNC.

NOTE This program provides a complete backup of the CNC. It is compatible with CNC software revision level K or greater. See included revision update information in NUMBackUp help file.

1.   **RS-232 cable diagrams: (See US112 – Communication Cables for Use with NUM CNC's and NUMDrive products)**

2.   **Set up communication link on CNC. (See US 116 - Procedures For NUMTools Communication Setup On CNC)**

3.   **Set up communications on PC (See US 140 - XWAY Driver Setup)**

In addition to the NUMBackUp Help file, see additional messages **(See US 141 NUMBackUp Alarms)**

Backup and Restore

The following documents the Step-by-Step Backup and Restore procedure for a NUM 10xx System with CNC Firmware greater than "K" version.

- ❑ For NUM 1050 or Axium Power systems : **(See US139 - NUMBackUp for DiscNT)**
- ❑ For NUM 1020/1040/1060 and 1080 systems, see Backup and Restore procedure documented below.

Backup Procedure
a.   Run NUMBackup – Double Click on NUMBackup icon.
b. If a communication error occurs (no communication), Click on Cancel. Press ESC key to exit. Double check steps 1-3 to ensure everything is setup correctly. If it is try another communication serial port on the CNC and change P112 accordingly. If a communication problem still exists try another serial port on PC and redo step 3. If problem still exists, there may be a possible communication port conflict on the PC or faulty hardware on the PC or CNC.
c. If no communication error occurs, click on window with folder tree structure. A red line should highlight it.
d. Press F8 for New to create a new directory to download files in.

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   e. After creating directory, double click on it to open it up.

   f. Click on box to the left of where it says all files, and a checkmark should appear in that box. A red line should highlight the large box with all of the file type selections. There should also be a large red arrow pointing from the left to the right.

   g. Ensure CNC is not in any "memory access" area. The safest screen to display is the axis display screen.

   h. Press F12 for transfer, to transfer file from the NC to the PC.

   i. If a question is asked, read it to ensure you are transferring files the correct way. If you are, click Yes.

   j. When the F12 button says transfer again (while transferring it will say stop), check the window in the upper R/H side of the NUMBackup program. If any of the files, have a NOK with an error number try to download those files individually a second time. Some files will give errors because there is no information in them on the CNC. Example: Tool Geometry NOK – Err 2.

Restore Procedure

   a. Run NUMBackup – Double Click on NUMBackup icon.

   b. If a communication error occurs (no communication), Click on Cancel. Press ESC key to exit. Double check steps 1-3 to ensure everything is setup correctly. If it is try another communication serial port on the CNC and change P112 accordingly. If a communication problem still exists try another serial port on PC and redo step 3. If problem still exists, there may be a possible communication port conflict on the PC or faulty hardware on the PC or CNC.

   c. If no communication error occurs, select file or files by clicking on check boxes on L/H side of screen.

   d. Click on window with folder tree structure. A red line should highlight it.

   e. Select directory from which files are to be transferred to CNC.

   f. Click on window above folder tree structure. A red line should highlight it.

   g. Select file or files to be transferred.

   h. Ensure CNC not is any "memory access" area. The safest screen to display is the axis display screen.

   i. Press F12 for transfer, to transfer file from the PC to the NC.

   j. If a question is asked, read it to ensure you are transferring files the correct way. If you are, click Yes.

   k. When the F12 button says transfer again (while transferring it will say stop), check the window in the upper R/H side of the NUMBackup program. If any of the files, have a NOK with an error number try to download those files individually a second time. Some files will give errors because there is no information in them on the CNC.

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NUMBackUp File List:

NUMBackup File Name List	
CNC Application Files	File Name on PC
Machine parameters	PARAM.xpa
Affaire Number	(1)
Options Grid	(1)
Color palette	palet.cpa
Part programs (zone 0)	*.xpi
Programs in zone 1	MACRO1.xm1
Programs in zone 2	MACRO 2.xm2
Programs in zone 3	MACRO 3.xm3
E800xx parameters	E800xx.e80
E810xx parameters	E810xx.e81
E820xx parameters	E820xx.e82
Datum shifts	DATA.dat
Tool offsets	JAUGES.jau
Tool wear offsets	JC_DYN.dyn
Tool geometries	JGEOM.geo
Axis calibration	CALIBR.xca
Inter-Axis calibration	*.xic
Serial interfaces	SERIAL.ser
MMI files	ihm.xmi,*.bmp,*.rsc,*.ini,*.txt;*.ico,*.cod,*.fnt
PLC Logic Binary	BINARY.xar
PLC Saved Memory (%M)	MEMORY.xme
PLC Logic Modules	*.xla
PLC C-Code , User Files	*.xtx, *.usr
I050 / Axium Power Drive Files	
Drive Parameters	Param.xva, configu.xcv
Individual Servodrive parameters	@*.xvx (*: servodrive number)
Telechar "Request Manager" Support files. (8 files)	Descri_*.tab, convert.par, convert.tp

(1) – It is not   possible to backup this memory are via NUMBackUp.

NUM Product technical information sheet.