

# Test Prints

Usage Report Page 2  
Information Page 3  
NVM Contents Page 9

## Usage Report Page

The Usage Report Page contains the following information:

- Printer Model Name.
- Printer Model Number.
- Printer Serial Number.
- Date of last print job received.
- Total ink consumed.
- Date of first print job received.
- Number of pages printed (media size/media type/print quality setting).

To print the Usage Report Page, hold the power button down and press the resume button **once**.



**Sample of the  
Usage Report Page**

USAGE REPORT PAGE

Printer model name : hp designjet 128ps  
 Printer model number : C7791A  
 Printer serial number : S02C01800H  
 Date : 02-20-2003  
 Total Ink Consumed : K = 1 cc C = 0 cc M = 0 cc  
 V = 0 cc LC = 0 cc LT = 0 cc  
 Born-on Date : 02-20-2003

Pages Printed

	Draft	Normal	Best/Premium
<b>A4/A</b>			
Plain Paper	0	2	1
Coated Paper	0	0	1
Glossy Paper	0	0	0
Transparency	0	0	0
Photo Paper	0	0	0
2 sided Brochure Paper	0	0	0
Heavy Weight Coated	0	0	0
Semi-Gloss Photo Paper	0	0	0
Other Media	0	0	0
<b>A3/B/B+</b>			
Plain Paper	0	21	2
Coated Paper	0	0	0
Glossy Paper	0	0	0
Transparency	0	0	0
Photo Paper	0	0	0
2 sided Brochure Paper	0	0	0
Heavy Weight Coated	0	0	0
Semi-Gloss Photo Paper	0	0	0
Other Media	0	0	0
<b>A2/C</b>			
Plain Paper	0	0	0
Coated Paper	0	0	0
Glossy Paper	0	0	0
Transparency	0	0	0
Photo Paper	0	0	0
2 sided Brochure Paper	0	0	0
Heavy Weight Coated	0	0	0
Semi-Gloss Photo Paper	0	0	0
Other Media	0	0	0
<b>A1/D</b>			
Plain Paper	0	0	0
Coated Paper	0	0	0
Glossy Paper	0	0	0
Transparency	0	0	0
Photo Paper	0	0	0
2 sided Brochure Paper	0	0	0
Heavy Weight Coated	0	0	0
Semi-Gloss Photo Paper	0	0	0
Other Media	0	0	0

Total Pages Printed	A4/A	A3/B/B+	A2/C	A1/D
Sheet	4	16	0	0
Roll	0	7	0	0

Total Jobs: 9

## Information Page

The Information Page contains the following information:

- Printer Identification (see Page 4-5).
- Printer Status (see Page 4-5).
- Printer Job Queue (see Page 4-5).
- Printer Errors and Warnings (see Page 4-6).
- Printer Usage (see Page 4-6).
- Ink Consumable Identification (see Page 4-7).
- Ink Consumable Status (see Page 4-7).
- Ink Consumable Usage (see Page 4-7).
- Network Card Information (see Page 4-8).

To print the Information Page, hold the power button down and press the resume button **4 times**.



**Sample of the  
Information Page  
(page 1 of 3)**

INFORMATION PAGE			
Printer Identification Section			
Printer model name	:	hp designjet 120ps	
Printer model number	:	C7781A	
Printer serial number	:	S9201800H	
Firmware release	:	A.09.14	
Service Id	:	13080	
Type ROM	:	Flash	
AECS Present	:	No	
Num I/O cards present	:	0	
Printer Status Section			
Date	:	02-28-2003	
Printer Status	:	OK	
Printhead Alignment	:	Yes Page# 8	
Factory Paper Advance Calibration	:	Yes	
Custom Paper Advance Calibration	:	None	
Close Loop Color (ROM/Drivers)	:	Draft/Normal/Best	Premium
Coated Paper	:	No Calibrated	No Calibrated
Glossy Paper	:	No Calibrated	No Calibrated
Photo Paper	:	No Calibrated	No Calibrated
Heavy Weight Coated	:	No Calibrated	No Calibrated
Semi-Gloss Photo Paper	:	No Calibrated	No Calibrated
Printer Latest Errors	:		
#01	:		
#02	:		
#03	:		
#04	:		
#05	:		
#06	:		
#07	:		
#08	:		
#09	:		
Printer Latest Warnings	:		
#01	:		
#02	:		
#03	:		
#04	:		
#05	:		
#06	:		
#07	:		
#08	:		
#09	:		
Latest Print jobs	:		
#01	:	Printed plain.normal	Page# 9
#02	:	Printed plain.normal	Page# 8
#03	:	Printed plain.normal	Page# 7
#04	:	Printed user-alignR14	Page# 7
#05	:	Printed best	Page# 7
#06	:	Printed plain.fast	Page# 6
#07	:	Printed plain.fast	Page# 4
#08	:	Printed diagn.padv	Page# 3
#09	:	Printed plain.normal	Page# 2
#10	:	Printed plain.fast	Page# 1

**Sample of the  
Information Page  
(page 2 of 3)**

Printer Usage Section									
Total Ink Consumed	: K =	1 cc	C =	0 cc	M =	0 cc	V =	0 cc	LC =
Printheads used by color	: K =	1	C =	1	M =	1	V =	1	LC =
Total Page Count	: 10								
Scan Axis Usage	: 0%	Paper Axis Usage	: 0%	Service Station Usage	: 0%	Carriage Usage	: 0%	Cutter Usage	: 0%
Ink Consumable Identification Section									
Printhead Information									
Model Name	: K =	HP No. 11	C =	HP No. 11	M =	HP No. 11	V =	HP No. 11	LC =
Serial Number	: K =	01-01-0155845	C =	01-01-0012108	M =	01-01-0799368	V =	01-02-0177918	LC =
Out of Warranty Date	: K =	05-05-2003	C =	10-21-2003	M =	12-30-2003	V =	03-02-2004	LC =
Cartridge Information									
Model Name	: K =	HP No. 84	C =	HP No. 11	M =	HP No. 11	V =	HP No. 84	LC =
Serial Number	: K =	04-02-0804226	C =	04-02-1218770	M =	04-02-1143714	V =	04-02-0748252	LC =
Expiration Date	: K =	08-29-2005	C =	08-29-2005	M =	08-29-2005	V =	03-12-2005	LC =
Ink Consumable Status Section									
Printhead Status	: K =	Inserted	C =	Inserted	M =	Inserted	V =	Inserted	LC =
Scan Axis Shutdown	: K =	No	C =	No	M =	No	V =	No	LC =
Cartridge Status	: K =	Inserted	C =	Inserted	M =	Inserted	V =	Inserted	LC =
Ink Consumable Usage Section									
Ink Consumed Printhead	: K =	0 cc ( 0 %)	C =	0 cc ( 0 %)	M =	0 cc ( 0 %)	V =	0 cc ( 0 %)	LC =
Usage Time Printhead	: K =	0 days	C =	0 days	M =	0 days	V =	0 days	LC =
Ink Consumed Cartridge	: K =	1 cc ( 1 %)	C =	0 cc ( 0 %)	M =	0 cc ( 0 %)	V =	0 cc ( 0 %)	LC =
Printhead history:									
K:	#1 -	Inserted -	0 cc ( 0%) -	0 days -	Max. Recovery Level	0			
C:	#1 -	Inserted -	0 cc ( 0%) -	0 days -	Max. Recovery Level	0			
M:	#1 -	Inserted -	0 cc ( 0%) -	0 days -	Max. Recovery Level	0			
V:	#1 -	Inserted -	0 cc ( 0%) -	0 days -	Max. Recovery Level	0			
LC:	#1 -	Inserted -	0 cc ( 0%) -	0 days -	Max. Recovery Level	0			
LM:	#1 -	Inserted -	0 cc ( 0%) -	0 days -	Max. Recovery Level	0			

**Sample of the  
Information Page  
(page 3 of 3)**

I/O Section			
----- HP JetDirect Configuration -----		----- IPX/SPX -----	
Status:	I/O Card Ready	Status:	Ready
Model Number:	J6057A	Primary Frame Type:	Auto Select
Hardware Address:	0001E65E25EC	Network Frame Type	Rcvd
Firmware Version:	R.22.03	Unknown EN_II	27
Port Config:	10BASE-T HALF	00000001 EN_802.2	886
Auto Negotiation:	On	Unknown EN_802.3	1
Manufacturing ID:	22014150902201		
Date Manufactured:	12/2001		
----- Security Settings -----		----- Novell/NetWare -----	
Admin Password:	Not Specified	Status:	16
SSL/TLS:	Disabled	NOT CONFIGURED	
Cert Expires:	Not Applicable	Node Name:	NP15E25EC
SNMP Versions:	112	NetWare Model:	Queue Server
SNMP Set Cnty Name:	Not Specified	NDS Tree Name:	
Access List:	Not Specified	NDS Context:	
----- Network Statistics -----		----- AppleTalk -----	
Total Packets Received:	6987	Attached Server:	
Unicast Packets Received:	63	SAP Interval:	60 sec
Bad Packets Received:	0		
Framing Errors Received:	0		
Total Packets Transmitted:	110		
Unsendable Packets:	5		
Transmit Collisions:	2		
Transmit Late Collisions:	0		
----- TCP/IP -----		----- AppleTalk -----	
Status:	Ready	Status:	Ready
Host Name:	NP15E25EC	Name:	C CAD1
IP Address:	15.180.33.102	Zone:	ICD-R&D
Subnet Mask:	255.255.248.0	Type 1:	LaserWriter
Default Gateway:	15.180.32.1	Type 2:	DeskWriter
Config By:	DHCP	Network Number:	1508
DHCP Server:	15.203.192.24	Node Number:	104
TFTP Server:	Not Specified		
Config File:	Not Specified	Status:	Ready
Domain Name:	bpo.hp.com		
DNS Server:	15.180.0.29		
WINS Server:	15.180.3.114		
Syslog Server:	Not Specified		
Idle Timeout:	270 sec		
Web JetAdmin URL:	Not Specified		

## Information Page Explanations

### Printer Identification Section

Printer Identification Section	
Printer model name	: hp designjet 120ps
Printer model number	: C7791A
Printer serial number	: SG2CG1800M
Firmware release	: A.00.14
Service Id	: 13080
Type ROM	: Flash
ARSS Present	: No
Num I/O cards present	: 0

- Should a Service Note be applied to the Printer?
- Is the Firmware Release the most current one?
- Is the Printer under warranty?
- Can the Printer Firmware be upgraded?
- Does the Printer have a Network card?


### Printer Status Section

Printer Status Section	
Date	: 02-20-2003
Printer Status	: OK
Printhead Alignment	: Yes Page# 6
Factory Paper Advance Calibration	: Yes
Custom Paper Advance Calibration	: None


- Is the computer sending the right data to the Printer?
- Has the automatic Printhead Alignment failed?
- Has the factory Paper-Advance Calibration been performed?
- Has the user calibrated a specific paper type for top accuracy?

### Printer Status - Job Queue


Latest Print jobs:		
#0: "USAGE REPORT"	" PMode: plain_normal	Page# 3
#1: "USAGE REPORT"	" PMode: plain_normal	Page# 8
#2: "section3 image q"	" PMode: diagn_padv	Page# 7
#3: "section2 image q"	" PMode: userAlignR14	Page# 7
#4: "section1 image q"	" PMode: best	Page# 7
#5: "Unnamed Job"	" PMode: plain_fast	Page# 6
#6: "Rotation of IM00"	" PMode: plain_fast	Page# 4
#7: "Rotation of IM00"	" PMode: diagn_padv	Page# 3
#8: "Test Page"	" PMode: plain_normal	Page# 2
#9: "	" PMode: plain_fast	Page# 1



Filename



Printmode



Page

- Which file is causing the problem?
- Is the User "causing" print quality issues?

## Printer Status Section - Errors and Warnings

Printer Latest Errors:

#	Error Code	SM	Task Name	Date	Page#
#0:	00601 A.01.01	02	CarriageCtrl.c : 0443>	unknown	15
#1:					
#2:					
#3:					
#4:					
#5:					
#6:					
#7:					
#8:					
#9:					

Refer to the System Error Codes Chapter for more information

Printer Latest Warnings:

#	Warning Code	SM	Task Name	Date	Page#
#0:	00112 A.01.01	00	RootTask <Tag/TagInit.c : 0189>	unknown	15
#1:					
#2:					
#3:					
#4:					
#5:					
#6:					
#7:					
#8:					
#9:					

Arrows point from the following fields in the warnings table to labels A-F:

- #0: 00112 → **A**
- A.01.01 → **B**
- 00 → **C**
- RootTask <Tag/TagInit.c : 0189> → **D**
- unknown → **E**
- 15 → **F**

**A** - Error Code.

**B** - Printer Firmware Release when the problem occurred.

**C** - Code for the state of the Printer (see table below).

**D** - Task name, file name, code line.

**E** - Date when problem occurred.

**F** - Page count when problem occurred.

- Has an unrecoverable error occurred?
- Why did the Printhead Alignment fail?
- Why is the Printer not able to initialize completely?
- Is there a Firmware/Driver bug?

## Codes for Printer States

Code (SM)	State	Code (SM)	State
00	Printer OFF	06	Printing
01	Printer initializing	07	Not Ready
02	Printer	08	Error
03	While replacing Printheads	09	While powering down
04	While replacing Ink Cartridges	10	Sleep
05	Calibrating	11	While upgrading Firmware

## Printer Usage Section

Printer Usage Section									
Total Ink Consumed	:	K =	1 cc	C =	0 cc	M =	0 cc		
		Y =	0 cc	LC =	0 cc	LM =	0 cc		
Printheads used by color:	K =	1	C =	1	M =	1	Y =	1	LC = 1 LM = 1
Total Page Count :	10								
Scan Axis Usage :	0%	Paper Axis Usage :	0%	Service Station Usage :	0%				
Carriage Usage :	0%	Tube Usage :	0%	Cutter Usage :	0%				

- Does the Printer have too much "Aerosol"?
- Is the Printer too noisy?
- Is the Printer close to it's end of life?

## In Consumable Identification Section

Ink Consumable Identification Section			
Printhead Information			
Model Name	: K = HP No. 11	C = HP No. 11	M = HP No. 11
	Y = HP No. 11	LC = HP No. 11	LM = HP No. 11
Serial Number	: K = 01-01-0155845	C = 01-01-0912108	M = 01-01-0799368
	Y = 01-02-0177918	LC = 01-01-0924122	LM = 01-01-0028581
Out of Warranty Date	: K = 05-05-2003	C = 10-21-2003	M = 12-30-2003
	Y = 03-02-2004	LC = 01-06-2004	LM = 01-06-2004
Cartridge Information			
Model Name	: K = HP No. 84	C = HP No. 11	M = HP No. 11
	Y = HP No. 82	LC = HP No. 84	LM = HP No. 84
Serial Number	: K = 04-02-0864226	C = 04-02-1218770	M = 04-02-1143714
	Y = 04-02-0748252	LC = 04-02-2388791	LM = 04-02-0750177
Expiration Date	: K = 08-29-2005	C = 08-29-2005	M = 08-29-2005
	Y = 03-12-2005	LC = 08-28-2005	LM = 08-29-2005

- Are ink consumables from HP and covered by warranty?
- Have the Ink Cartridges expired?
- Are the Printheads too old?

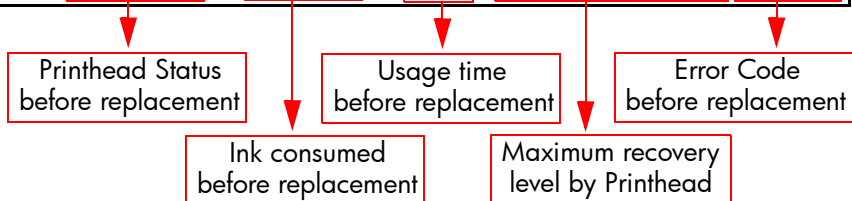
## Ink Consumable Status Section

Ink Consumable Status Section			
Printhead Status	: K = Inserted	C = Inserted	M = Inserted
	Y = Inserted	LC = Inserted	LM = Inserted
Scan Axis Shutdown	: K = No	C = No	M = No
	Y = No	LC = No	LM = No
Cartridge Status	: K = Inserted	C = Inserted	M = Inserted
	Y = Inserted	LC = Inserted	LM = Inserted

- Are the Printheads/Ink Cartridges OK?
- Do the Printheads need aligning?

## Ink Consumable Usage Section

Ink Consumable Usage Section			
Ink Consumed Printhead	: K: 0 cc ( 0 % )	C: 0 cc ( 0 % )	M: 0 cc ( 0 % )
	Y: 0 cc ( 0 % )	LC: 0 cc ( 0 % )	LM: 0 cc ( 0 % )
Usage Time Printhead	: K: 0 days	C: 0 days	M: 0 days
	Y: 0 days	LC: 0 days	LM: 0 days
Ink Consumed Cartridge	: K: 1 cc ( 1 % )	C: 0 cc ( 0 % )	M: 0 cc ( 0 % )
	Y: 0 cc ( 0 % )	LC: 0 cc ( 0 % )	LM: 0 cc ( 0 % )
Printhead history:			
K:	#1 - Inserted -	0 cc ( 0 % ) -	0 days - Max. Recovery Level 0
C:	#1 - Inserted -	0 cc ( 0 % ) -	0 days - Max. Recovery Level 0
M:	#1 - Inserted -	0 cc ( 0 % ) -	0 days - Max. Recovery Level 0
Y:	#1 - Inserted -	0 cc ( 0 % ) -	0 days - Max. Recovery Level 0
LC:	#1 - Inserted -	0 cc ( 0 % ) -	0 days - Max. Recovery Level 0
LM:	#1 - Inserted -	0 cc ( 0 % ) -	0 days - Max. Recovery Level 0



- Are the Printheads too old?
- Are the Printheads in warranty?
- Are the Ink Cartridges almost empty?
- Is there enough capacity for the Ink cartridges?
- Is the User replacing the Printheads too early?
- Is the User trying to recover the Printheads?
- Is the Printer destroying the Printheads?

### I/O Section - hp jetdirect configuration

```

----- HP JetDirect Configuration -----
Status:                                I/O Card Ready

Model Number:                          J6057A
Hardware Address:                       0001E65E25EC
Firmware Version:                       R.22.03
Port Config:                            10BASE-T HALF
Auto Negotiation:                       On
Manufacturing ID:                       22014150902201
Date Manufactured:                      12/2001

```

- Is the network transmission speed OK?
- Does the Network Card have the correct Firmware Release?
- Is the Network Card the right one for this Printer?

### I/O Section - TCP/IP information

```

----- TCP/IP -----
Status:                                Ready

Host Name:                             NPI5E25EC
IP Address:                             15.180.33.102
Subnet Mask:                            255.255.248.0
Default Gateway:                        15.180.32.1
Config By:                              DHCP
DHCP Server:                            15.203.192.24
TFTP Server:                            Not Specified
Config File:                            Not Specified
Domain Name:                            bpo.hp.com
DNS Server:                             15.180.0.29
WINS Server:                            15.180.3.114
Syslog Server:                          Not Specified
Idle Timeout:                           270 sec
Web JetAdmin URL:                       Not Specified

```

- Is the IP address OK?
- Is the Subnet Mask OK?



# NVM Contents Page

The NVM Contents Page contains the following information:

- EEROM values dump containing all the values stored in the EEROM (Calibration, etc.)
- Printheads Acumen dump
- Cartridges Acumen dump.

To print the NVM Contents Page, hold the power button down and press the cancel button **once** and the resume button **twice**.



**Sample of the  
NVM Contents Page  
(page 1 of 3)**

```

NUM CONTENTS PAGE
NUM Dump 0 to 2K
Printer model name      : hp designjet 120ps
Printer serial number   : 02C01900N
Date                   : Unknown

NUM Dumps:

0000106 97 53 47 22 43 07 41 39 30 38 44 00 00 00 00 00
00020 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00040 26 0b bb c3 9c 04 00 00 00 00 00 00 14 50 00 00
00060 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00080 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
000a0 95 1e 40 00 00 00 00 00 00 29 aa 00 0a e6 72 00
000c0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
000e0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00100 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00120 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00140 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00160 74 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00180 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
001a0 a0 00 00 00 00 00 00 00 00 00 a0 3f 36 f4 d5 d4
001c0 00 00 bc d1 00 00 00 00 00 00 00 00 20 31 02
001e0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00200 00 00 00 00 00 00 5a 3f 35 3f 40 cb b6 94 2e c8
00220 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00240 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00260 00 00 ff 00 00 00 00 00 43 37 37 39 31 40 5e 2c
00280 0a 65 74 20 31 32 30 00 70 73 00 32 a0 05 7e 7a a0
002a0 0a 0a ff 3f 00 00 00 04 8a 37 00 60 00 00 00 62
002c0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
002e0 00 00 00 00 00 00 00 a0 00 00 00 00 00 00 00
00300 0f 1a eb 07 0f 1b eb 1a eb 1a eb 07 0f 17 a0 1a
00320 00 00 00 00 00 00 00 00 00 00 46 fc 37 00 60 00
00340 5e 00 00 00 00 00 00 00 00 00 46 fc 37 00 60 00
00360 31 33 00 a0 00 d6 60 a0 3f 00 02 00 00 00 00 00
00380 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
003a0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
003c0 0c 0d 0e 0f 00 01 02 03 04 05 06 07 08 0e 13 1b
003e0 ff 0a 64 50 42 00 00 00 32 00 73 52 42 00 00
00400 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00420 00 40 50 10 62 00 1b 07 70 43 f7 00 ac a0 e7 12
00440 ac a0 e7 12 ac 28 82 3c a3 f7 00 ac a0 e7 12
00460 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00480 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
004a0 00 00 07 00 00 00 00 00 00 00 00 00 00 00 0a
004c0 ea ec ac 04 32 00 04 82 b6 fe 04 19 d5 04 04
004e0 00 10 00 72 17 10 5e 61 00 01 01 01 01 01
00500 0c 11 0a 30 30 0a 30 0a 30 0a 30 0a 30 04 14
00520 00 00 00 00 00 00 00 00 00 01 04 42 68 c5 00 00
00540 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00560 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00580 01 0a 30 01 00 00 00 00 00 00 00 00 00 00 00
005a0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
005c0 04 c2 00 00 00 00 00 00 00 00 01 0a 30 01 00
005e0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00600 00 00 00 00 00 00 00 00 00 00 01 84 82 b6 c5 00
00620 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00640 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00660 00 01 0a 30 01 00 00 00 00 00 00 00 00 00 00
00680 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
006a0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
006c0 01 04 00 0f a5 00 00 00 02 00 00 01 0a 30 01
006e0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00700 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00720 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00740 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00760 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00780 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
007a0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
007c0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
007e0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00800 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00820 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00840 e7 a8 00 00 00 00 00 00 00 00 00 00 00 00 00
00860 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00880 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
008a0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
008c0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
008e0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00900 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00920 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00940 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00960 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
00980 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
009a0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
009c0 00 00 00 00 00 00 00 00 00 00 00 00 00 00 00
009e0 00 0
```

**Sample of the  
NVM Contents Page  
(page 2 of 3)**

```

Printheads Acumen Dump

Ph Acumen K:
00: 0c 10 42 34 2b 00 00 00 4e 00 00 00 00 00 00
10: 0b 21 ed 2a 15 09 83 14 44 21 66 83 a6 96 28 7b
20: d7 73 7a 13 f6 00 00 00 1d 01 63 01 87 fe 27 00
30: 0a 00 00 04 00 00 6d 53 c6 a4 32 00 7c 19 00 00
40: ca 00

Ph Acumen C:
00: 09 11 02 34 2b 00 00 00 4e 00 00 00 00 00 00
10: 0b 11 d1 32 15 37 ab b0 44 21 66 84 a6 96 28 7b
20: d7 74 6b 03 f6 74 00 00 1d 01 63 01 87 fe 27 00
30: 08 00 00 04 00 00 6d 52 e6 a4 32 00 7c 19 cf 38
40: ca 00

Ph Acumen M:
00: 0a 12 02 34 2b 00 00 00 4e 00 00 00 00 00 00
10: 0b 11 db 32 15 39 ca 20 44 21 66 8c a8 16 29 7b
20: d7 74 77 03 f6 70 00 00 1d 01 63 01 87 fe 27 00
30: 07 00 00 04 00 00 6d 53 46 a4 32 00 7c 19 cf 38
40: ca 00

Ph Acumen V:
00: 0b 13 02 34 2b 00 00 00 4e 00 00 00 00 00 00
10: 0b 11 e4 32 15 0a db f8 48 21 66 87 67 16 28 7b
20: d7 74 83 04 f6 00 00 00 1d 01 63 01 87 fe 27 00
30: 07 00 00 04 00 00 6d 52 66 a4 32 00 7c 19 cf 38
40: ca 00

Ph Acumen LC:
00: 0d 11 22 34 2b 00 00 00 4e 00 00 00 00 00 00
10: 0b 11 dc 32 15 38 67 68 44 21 66 8b 65 56 28 7b
20: d7 73 71 d3 f6 00 00 00 1d 01 63 01 87 fe 27 00
30: 0a 00 00 04 00 00 6d 52 66 a4 32 00 7c 19 00 00
40: ca 00

Ph Acumen LM:
00: 0e 12 22 34 2b 00 00 00 4e 00 00 00 00 00 00
10: 0b 11 dc 32 15 01 be 94 44 21 66 7e e6 16 28 7b
20: d7 73 79 f3 f6 00 00 00 1d 01 63 01 87 fe 27 00
30: 0a 00 00 04 00 00 6d 51 e6 a4 32 00 7c 19 00 00
40: ca 00

```

**Sample of the  
NVM Contents Page  
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```

Cartridges Acumen Dump

Cart Acumen K:
00: 08 80 42 34 2c 00 00 00 00 00 00 00 4f aa 5d 33
10: 97 2a 65 cc 0b 11 e6 30 15 34 bf 89 89 c1 33 12
20: 14 34 39 00 00 00 00 26 00 61 40 00 00 00 1f
30: ff c1 01 01 63 01 80 43 41 35 01 00 00 00 00
40: 00 00

Cart Acumen C:
00: 0d 81 02 34 2c 00 00 00 00 00 00 00 4f aa 5d 33
10: 97 2a 65 cc 0b 11 df 30 15 4a 63 49 08 81 33 07
20: 64 34 39 00 00 00 00 26 00 45 10 00 00 00 1f
30: ff c1 01 01 63 01 80 43 3a 18 01 00 00 00 00
40: 00 00

Cart Acumen M:
00: 0e 82 02 34 2c 00 00 00 00 00 00 00 4f aa 5d 33
10: 97 2a 65 cc 0b 11 d1 30 15 45 ce 89 88 81 33 07
20: 64 34 39 00 00 00 00 26 00 45 10 00 00 00 1f
30: ff c1 01 01 63 01 80 43 36 e9 01 00 00 00 00
40: 00 00

Cart Acumen V:
00: 0f 83 02 34 2c 00 00 00 00 00 00 00 4f aa 5d 33
10: 97 2a 65 cc 0b 31 e1 20 15 2d ab 71 08 81 33 12
20: 13 74 39 00 00 00 00 26 00 61 20 00 00 00 1f
30: ff c1 01 01 63 01 80 43 15 f5 01 00 00 00 00
40: 00 00

Cart Acumen LC:
00: 09 81 22 34 2c 00 00 00 00 00 00 00 4f aa 5d 33
10: 97 2a 65 cc 0b 21 e4 28 15 91 cc dd 09 c1 33 12
20: 14 34 39 00 00 00 00 26 00 61 40 00 00 00 1f
30: ff c1 01 01 63 01 80 43 1c 9c 01 00 00 00 00
40: 00 00

Cart Acumen LM:
00: 0a 82 22 34 2c 00 00 00 00 00 00 00 4f aa 5d 33
10: 97 2a 65 cc 0b 11 e6 30 15 2d c9 85 09 c1 33 12
20: 14 34 39 00 00 00 00 26 00 61 40 00 00 00 1f
30: ff c1 01 01 63 01 80 43 1c 24 01 00 00 00 00
40: 00 00

```