Display/					
<b>Command</b>	Description Con	<u>itrol</u>	<u>Info Type</u>	Use	Used By
'C':	Channel lineup info	D	Local	Automatic	
'P':	Program Info string	D	Broadcast	Automatic	
'F':	Configuration	D/C	Local	Automatic	
'f':	New Look Config	D/C	Local	Automatic	
'K':	Clock	D	Broadcast	Automatic	
'T':	Topline	D	Local	Automatic	
'B':	Bottomline	D	Local	Automatic	
'L':	Local text	D	Local	Automatic	
'j':	Order Info (Prevue)	D	Local	Automatic	
'I':	Weather I.D.	D	Local	Automatic	
'W':	WeatherInfo string	D	Broadcast	Automatic	
'G':	Nat'l graphic ad mask	D	Local	Automatic	
'A':	Address	С	Broadcast/Local	Automatic	
0xBB:	Box off	С	Broadcast	Automatic	
'S':	Script	D	?	Automatic	S
'x':	X utility command	С	Broadcast/Local	Exception	
'd':	Delete file	С	-	Exception	S
'%':	Save command	С	-	Exception	
'R':	Reset command	С	-	Exception	
'D':	Diagnostic mode	С	-	Exception/Test	
'V':	Version	D	Broadcast	Exception/Test	
'Q':	Send Qtable list strings	D	Broadcast	Exception	
'H':	Binary download	D	Broadcast/Local	Exception	
'O':	Reset Blackout	С	-	Unused	
'M':	Mode command	С	-	(not used)	
'E':	Extension	С	-	(implemented but unused)	1
'N':	National text	D	-	(disabled)	
'Z':	Nat'l text ad mask	D	-	(disabled)	

# 2400 BAUD COMMANDS THE AMIGA C.G. UNDERSTANDS:

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# **AUTOMATIC COMMANDS**

## **Channel lineup info Command:**

Purpose: To give the c.g. a list of channels and their attributes to display

Bytes	<u>Max B</u>	<u>ytes</u>	Descp	Comment
1		1	55h	Header
2 3		1 1	AAh C	Channel lineur command
3 4		1	•	Channel lineup command 0-FFh $1 = Jan 1st$
4		1	Julian Day	0-FFII I – Jan Ist
5*		1	^R (12h) start of	source sequence
		1	Source attribute	1-FFh
				Bit $0 = 1$
				Bit $1 = (1 = \text{highlite source}, 0 = \text{no hilite})$
				Bit $2 = (1 = \text{summary by source}, 0 = \text{none})$
				Bit $3 = (1 = \text{Prevue source disable}, 0 = \text{enabled})$
				Bit $4 = (1 = \text{Prevue PPV source}, 0 = \text{normal})$
		6	Source name	A-Z, 1-0
		1	^Q (11h)	channel number to follow (this sequence optional)
		9	Channel Number	
		1	^T (14h)	time slot mask to follow (this sequence optional)
		6	time slot mask	each of the 48 bits represent timeslots (Central)
		1	^A (01h)	Call letters to follow (this sequence optional)
	**	6	Call letters	Can letters to follow (this sequence optional)
		0	Call letters	
		1	00h	terminator
		1	CS	Checksum

Time Slot Codes:	Byte	1	2	3	4	5	6
<u>Time R</u>	lange	5:00am	9:00am		5:00pm	9:00pm	1:00am
		8:30am	12:30pm	14:30pm	8:30pm	12:30am	4:30am
Hex Co	ode						
0x8	0	5:00am	9:00am	1:00pm	5:00pm	9:00pm	1:00am
0x4	0	5:30	9:30	1:30	5:30	9:30	1:30
0x2	0	6:00	10:00	2:00	6:00	10:00	2:00
0x1	0	6:30	10:30	2:30	6:30	10:30	2:30
0x0	8	7:00	11:00	3:00	7:00	11:00	3:00
0x0	4	7:30	11:30	3:30	7:30	11:30	3:30
0x0	2	8:00	12:00pm	4:00	8:00	12:00am	4:00
0x0	1	8:30	12:30	4:30	8:30	12:30	4:30

\* Note-- Multiple channel lineups will be sent for a customer in a single command. That is, beginning with the R, the sequence may be repeated for each subsequent channel. The last two bytes (0 and checksum) are added at the end of the channel lineup.

\*\* Prevue will allow 7 characters, EPG 7, and Jr only 5. Presently the HP will only allow 4. 11/13/89 The c.g. will not accept C commands over 1500 bytes long. It will also not accept them if the Julian date is not current or next day or if the command is of a different length or checksum of the previous C command.

### **Program information string Command:**

Purpose: To give the c.g. broadcast program strings for a given source. The c.g. ignores any string that is not dated correctly or in its channel lineup.

Bytes	Max Bytes	Descp	Comment
1	1	55h	Header
2	1	AAh	
3	1	Р	Program info command
4	1	Timeslot/Blackout	Bits 0-5 timeslot (01-30h)
			Bit 6 $1 =$ blackout
			Bit 7 - unused
5	1	Julian Day	0-FFh  1 = Jan 1st
6-	6	Source name	A-Z, 1-0
	1	^R (12h) end of s	source sequence
	1	String attribute	1-FFh
		-	Bit $0 = 1$
			Bit $1 = (1 = movie)$
	511	Program Listing string	Note c.g. allows more characters than can be sent
	1	00h	terminator
	1	CS	Checksum

**Configuration Command:** Purpose: To give the c.g. local configuration data

<b>Bytes</b>	Max Bytes	<u>Descp</u>	<u>Comment</u>
1	1	55h	Header
2	1	AAh	
3	1	F	Configuration command
4	1	Backward display window $A = 0$	B = 1/2 hour back
5	1	Forward display window	A = Current I = 4 hours forward
6	1	Scroll Speed	1 = Fast 8 = slow
7-8	2	# of Local ads	1-48
9	1	# of lines in ad	3 - 8
10	1	Crawl	Y/N (EPG only)
11	1	Minus minutes	1-9 hex
12	1	Plus minutes	1-9 hex was Ratio National/Local
13	1	Time Zone	1 - 9 $2 =$ Hawaii $9 =$ Virgin Island
14	1	Observe Savings Time	Y/N
15	1	Continuation	Y/N/P = Prime Time (Not used)
16	1	Keyboard	Y/N
17	1	Minus 10 windows	Y/N was What's on Pay Movies
18	1	Minus 3 windows Y/N	was What's on Movies
19	1	Movie summary Pay	Y/N (Not used)
20	1	Movie Summary	Y/N (Not used)
21	1	Graphics	Y/N/E (E =enhanced on EPG only)
22	1	Video Insertion	Y/N/L (Prevue Only)
23	1	Reserved	X
	1	00h	terminator
	1	CS	Checksum

# **New Look Configuration Command:** Purpose: To give the c.g. local configuration data

# Updated 11/11/93

<u>Bytes</u> 1	Max Bytes	Descp 55h	<u>Comment</u> Header
2 3	1 1	AAh f	New Look Configuration command
4	1	Command family (ASCII)	1-9 (ASCII) 1- is the only family used.
5-6	2	Command length (HEX)	For this command ONLY the length bytes includes the checksum. **
7	1	Roll and Hold time	0-9 (ASCII), $0 =$ continuous
8	1	Grid Source/Channel Order	(S for Source first, C for Channel first)
9	1	Movie Recap Frequency	0-9 (ASCII) Number of rotations of grid between recaps. (0 is disable)
10	1	Grid SBS Freqency	0-9 (ASCII) Number of rotations of grid between Summary by Source. (0 is disable)
11-12	2	Grid SBS forward window	1-48 (ASCII) Number of timeslots forward.
13-14	2	Scroll SBS forward window	1-48 (ASCII) Number of timeslots forward.
15	1	Display Mode	G = Grid mode, S = Scroll mode.
16	1	Graphic Ad Insertion	Y/N (ASCII) for the Advantage systems.
17	1	Pie format	A-Z (ASCII) default 'A'.
18	1	00h	terminator
19	1	CS	Checksum

\*\* ALL other commands using the command length bytes in the header DO NOT include the checksum in the command length. This is the ONLY command that includes the checksum byte in the command length.

### **Clock Command:**

Purpose: To send the c.g. the correct current time.

<u>Bytes</u>	<u>Max Bytes</u>	Descp	Comment	
1	1	55h	Header	
2	1	AAh		
3	1	Κ	Clock	
4	1	Day	0h = Sunday	06h = Saturday
5	1	Month	0h = January	0Bh = December
6	1	Date	0h = 1	0Eh = 311
7	1	Year	00 = 1900	63h = 1991
8	1	Hour	00h - 17h	midnight - 11:00 PM
9	1	Minute	00h - 3Bh	0 - 59
10	1	Second	00h - 3Bh	0 - 59
11	1	D.S.T.	00h = Standard	01h = D.T.S.
12	1	00h	terminator	
13	1	CS	Checksum	

# **Topline Command:** (EPG only) Purpose: To send the c.g. local topline data string

<b>Bytes</b>	<u>Max Bytes</u>	<u>Descp</u>	<u>Comment</u>
1	1	55h	Header
2	1	AAh	
3	1	Т	Topline command
4 -	40	Top Banner	optional $^X, ^Y, ^Z$ = Center, Left, Right
	1	00h	terminator
	1	CS	Checksum

# **Bottomline Command:**

Bottomline Command: (EPG only) Purpose: To send the c.g. local Bottom line data string

<b>Bytes</b>	<u>Max Bytes</u>	Descp	Comment
1	1	55h	Header
2	1	AAh	
3	1	В	Bottom banner command
4 -	40	Bottom Banner	optional $^X, ^Y, ^Z = Center, Left, Right$
	1	00h	terminator
	1	CS	Checksum

#### Local Ad Reset Command:

Purpose: To clear non-keyboard local text ad strings from c.g.

<b>Bytes</b>	<u>Max Bytes</u>	Descp	Comment
1	1	55h	Header
2	1	AAh	
3	1	L	Local text command
4	1	92h	Reset
5	1	00h	terminator
6	1	CS	Checksum

#### **Local Ad Command:**

Purpose: To send the c.g. local text ad string

<b>Bytes</b>	<u>Max Bytes</u>	Descp	Comment
1	1	55h	Header
2	1	AAh	
3	1	L	Local text command
4 -	1	text ad string	optional $X, Y, Z = Center, Left, Right$
			<sup>^</sup> K indicates crawl ad (EPG)
	1	^T (14h)	start/stop time to follow (this sequence optional)
	1	Beginning time slot	1-30h (Not used)
	1	Ending time slot	1-30h (Not used)
	1	00h	terminator
	1	CS	Checksum

**Order information Command:** (Prevue 3.04 and above only) Purpose: To send the c.g. local Order information data string

Bytes	Max Bytes	Descp	Comment
Bytes	Max Bytes	Descp	Comment
1	1	55h	Header
2	1	AAh	
3	1	j	Order info command
4	1	Julian Day	0-FFh $1 = Jan 1st$
5 -	100	Order Info string1	optional $^X$ = Center white optional $^Y$ = Center yellow
	1	^R	end of string
	100	Order Info string2	optional
	1	00h	terminator
	1	CS	Checksum

Note: if the string is not present the string in the c.g. will be deleted. For example to clear both strings send:

to clear string1, send:	55h	AAh	J	jd	^R	00h	CS		
to creat string 1, send.	55h	AAh	J	jd	^R	STRI	NG2	00h	CS
to clear string2, send:	55h	AAh	J	jd	STRI	NG1	^R	00h	CS

### Weather ID Command:

Purpose: To give the c.g. its local weather id

Bytes	Max Bytes	Descp	Comment
1	1	55h	Header
2	1	AAh	
3	1	Ι	I.D. command
4	1	Display count	0-9 * (See note)
5	10	Weather I.D.	id string
	1	^R	end of string
	26	City string	More than this interferes with graphics $(10\2\89)$
	1	00h	terminator
	1	CS	Checksum
* 0	1 1.		

\* 0 = never display

1 = display ever timeslot window 2 = every other window

3 = every third window etc.)

## Weather Data Command:

Purpose: To give the c.g. its broadcast weather data

<b>Bytes</b>	<u>Max Bytes</u>	Descp	Comment		
Bytes	Max Bytes	Descp	Comment		
1	1	55h	Header		
2	1	AAh			
3	1	W	Weather command		
4	1	display length	1-FFh (minutes)		
5	1	color I.D.	1-FFh		
6	1	icon I.D.	1-FFh *(See note)		
7	1	spare expansion byte	1-FFh		
8	10	I.D. string	ie TUL		
	1	^R	end of string		
	123	data string	embedded ^x,^y & ^z		
	1	00h	terminator		
	1	CS	Checksum		
* 0 = ill	legal				
$1 = n_0$	C				
2 = "v	vsun"				
3 = "wcloud" (partly cloudy)					
4 = "v	· ·	57			
5 = "v	vovercast"				
6 = "v	vsnow"				
7 = "wfog"					
	vcold"				

#### National Graphic Ad mask:

controls national graphic ads by deleting unused ads and remaking ng.ads (current ad list file)

(EPG Only)

Bytes	Max Bytes	Descp	Comment
1	1	55h	Header
2	1	AAh	
3	1	G	NG ad mask
4	1	bit mask for ads 1-8	
5	1	bit mask for ads 9-16	
6	1	bit mask for ads 17-24	
7	1	bit mask for ads 17-32	
8	1	bit mask for ads 33-40	
9	1	bit mask for ads 41-48	
10	1	00h	terminator
11	1	CS	Checksum

### **Address Command:**

Purpose: To put the c.g. in a state where it will receive commands. Box on will 'wake up' a box or group of boxes.

<u>Bytes</u>	<u>Max Bytes</u>	Descp	<u>Comment</u>
1	1	55h	Header
2	1	AAh	
3	1	А	I.D. command
4	9	C. G. type	A or B delimited with ':'
		C. G. select code	0-9,A-Z,_,*
		C. G. ext	e.g. C:AM0BC.GRT
	1	00h	terminator
	1	CS	Checksum

c.g. recognizes \* and ? as wild cards similar to DOS wild cards

#### Box off Command: Batch end

Purpose: To put the c.g. in a state where it will NOT receive any commands except weather data.

<u>Bytes</u> Bytes	<u>Max Bytes</u> Max Bytes	<u>Descp</u> Descp	<u>Comment</u> Comment
1	1	55h	Header
2	1	AAh	
3	1	BBh	Boxoff command
4	1	BBh	
	1	00h	terminator
	1	CS	Checksum

# **EXCEPTION COMMANDS**

#### Save Command:

Save text ads and current data to disk.

<b>Bytes</b>	<u>Max Bytes</u>	Descp	<u>Comment</u>
1	1	55h	Header
2	1	AAh	
3	1	%	Save command
4	1	00h	terminator
5	1	CS	Checksum

#### **Reset Command:**

Reset the cg for new software, fonts, files etc

<b>Bytes</b>	Max Bytes	Descp	Comment	
1	1	55h	Header	
2	1	AAh		
3	1	R	Reset	
4	1	00h	terminator	
5	1	CS	Checksum	

#### **Diagnostic Command:**

Diagnostics helps test the bit error rate of a system.

<b>Bytes</b>	<u>Max Bytes</u>	Descp	Comment
1	1	55h	Header
2	1	AAh	
3	1	D	Diagnostic
4-260	256	0h- FFh	256 byte test pattern
261	1	00h	terminator
262	1	CS	Checksum

#### Version Command:

Alerts system operator that system software may be out of date.

<b>Bytes</b>	<u>Max Bytes</u>	<u>Descp</u>	Comment
1	1	55h	Header
2	1	AAh	
3	1	V	I.D. command
4	1	Reserved	Not used 1-FFh
5	13	Version String	A string without blanks. Example "4.1"
	1	00h	terminator
	1	CS	Checksum

Updated 08/03/93

**X Utility Command:** Purpose: Send a command string to be performed from an Amiga dos prompt.

Bytos	Max Putos	Doson	Commont	
<u>Bytes</u> 1	<u>Max Bytes</u> 1	<u>Descp</u> 55h	<u>Comment</u> File name Header	
2	1	AAh	The name freader	
3	1	X	x Command	
4	1	Family	Hex number of the family of the c	ommand
<del>4</del> 5	1	Member	ASCII number of the member (if r	
6	1	Sub-Member	ASCII number of the member (if r	
0 7-	80	String	ASCII string (if needed)	leeded)
/	1	00h	terminator	
	1	CS	Checksum	
	-	0.5		
Family	"1"	- Sneak software	e test routines. (member required)	
	Member "TES	T" - Issue	hardware test.	(S/G/L)
	Member "N"	- Set sta	ate to perform the next SO.	(S/G/L)
	Member "A"	- Set sta	ate to perform the next async.	<b>(S)</b> .
Family	"2"		e for Sneak only. (member required)	
	Member "1"		Bumpers only	(S)
	Member "2"		Fitle Billboards only	(S)
	Member "3"		Specials (Reel Talks) only	(S)
	Member "4"		Promotions only	(S)
	Member "5"		Event billboard only	(S)
	Member "6"	- Insert		(S)
	Member "7"		nce to next promo	(S)
	Member "8"		Dlympic video types only	(S)
	Member "9"	- Play A	Adult video types only.	<b>(S)</b>
Family	"3"	- Miscellaneous	routines. (member required)	
	Member "0"		Sneak Prevue in QC mode.	<b>(S)</b>
	Member "1"	- QC Si	neak Prevue by frame number	(Not Used)
		(frame	e number is string)	
	Member "2"	- Issue	a system command for the Amiga.	(S/P/L)
	Member "3"	- Issue	Misc. Install commands: (sub-memb	per required)
		ember "0"	- Install format file from disk.	(S/G/L)
	Sub-me	ember "1"	<ul> <li>Install PFG file from disk.</li> </ul>	(S/G/L)
		ember "2"	<ul> <li>Install Types file from disk.</li> </ul>	(S/G/L)
	Sub-me	ember "3"	- Install Regions file.	<b>(S)</b>
		ember "4"	- Install g.ads file.	(P/G/L)
	Member "4"	- Remo	te Diagnostic keystrokes. (sub-mem	
	Sub-me	ember "0"	- Return to service.	(S/P/G/L)
	Sub-me	ember "1"	- Diagnostic screen.	(S/P/G/L)
	Sub-me	ember "2"	- Version screen.	(S/P/G/L)

### \* All commands are used for Sneak Prevue ONLY, unless noted otherwise.

S - Sneak Prevue	P - Prevue Guide
G - Prevue Guide Laser	L - Laser Guide Canada

#### **Q** Table Download Command:

Purpose: Send list of top source call letters.

Bytes	Max Bytes	Descp	Comment	
1	1	55h	File name Header	
2	1	AAh		
3	1	Q	Q Table	
4 -	1500	File	ASCII file qt on compact*	
	1	00h	terminator	
	1	CS	Checksum	
* File format is XX1, TAB, string1, CR,LF XX2, TAB, string,2 CR,LF XX3, TAB, string,3 CR,LF			; where XX1 is the first 3 letters of the 1st source ; where the string are in the same format as the ; order infomation string.	
XXn , tab, string,n CR,LF, ^Z				

#### **Binary Download Command:**

Purpose: Send binary files such as graphic ads or software. See examples at the end of document

<b>Bytes</b>	<u>Max Bytes</u>	Descp	<u>Comment</u>
1	1	55h	File name Header
2	1	AAh	
3	1	Н	Binary file
4 -	30	Filename	Name of file to be transmitted *
	1	00h	terminator
	1	CS	Checksum
	1	0Dh	carriage return (optional)
	1	0Ah	linefeed (optional)
	1	55h	Record Header
	1	AAh	
	1	Н	Record sub-command
	1	record #	0h-FFh (wraps)
	1	# of bytes in record	0h - FFh if 0 then end download
	255	Binary data	0h - FFh bytes
	1	CS	Checksum from Record header

The record portion of the command is sent once for each record. (usually of 128 bytes). The record portion of the command may be sent as many times as necessary but the c.g. must have them in ascending order.

\* Standard AmigaDos names e.g. "DF1:TEMP.DAT". If the name is of the form "DFx:NATnn.GRF" where x = 0 or 1 and nn = 01 - 40 then the c.g. will treat the file as a national graphic ad and will save or not save the file according to its NGad mask. (See the 'G' command)

# **OBSCURE COMMANDS**

**Blackout Reset Command:** (never used ?) Reset the blackout mask for all programming.

<b>Bytes</b>	<u>Max Bytes</u>	<u>Descp</u>	<u>Comment</u>
1	1	55h	Header
2	1	AAh	
3	1	0	Blackout Reset
4	1	00h	terminator
5	1	CS	Checksum

**Extension Command:** (implemented but unused) To give the c.g. new addressing modes for region and group addressing.

Bytes	<u>Max Bytes</u>	Descp		<u>Comment</u>	
1	1	55h		Header	
2	1	AAh			
3	1	0		Blackout Reset	
4	1	00h		terminator	
5	1	CS		Checksum	
'M':	Mode	command	С	_	(not used)
'N':	Natio	nal text	D	-	(disabled)
'Z':	Nat'l	text ad mask	D	-	(disabled)

# Order information Command: (Prevue 3.03 only)

Purpose: To send the c.g. local Order information data string

<b>Bytes</b>	<u>Max Bytes</u>	Descp	Comment
Bytes	Max Bytes	Descp	Comment
1	1	55h	Header
2	1	AAh	
3	1	J	Order info command
4 -	60	Order Info string	optional $^X$ = Center white optional $^Y$ = Center yellow
	1	00h	terminator
	1	CS	Checksum