

This section of the manual will document the Ad-Maestro's control ports, COMM Ports and their settings respectively.

Parallel - The Parallel port provides a control interface with video devices utilizing some form of parallel control. A list of these machines and interfaces is described later in this section. The table below lists the connector type, gender, pin and functions at the Ad-Maestro.

Pin out for 9 pin female Parallel connector on **Ad-Maestro**.

DB9 Female (Rear of Ad- Maestro)	Function	Notes
1	- 5 VDC	5 Volts DC (Negative)
2	D3	Data bit 3
3	D2	Data bit 2
4	D1	Data bit 1
5	D0	Data bit 0
6	NC	No Connect
7	+ 5 VDC	5 Volts DC (Positive)
8	GND	Ground
9	INT	Input for cassette sense

PSJ-03 Parallel Interface - The PSJ-03 interface must always be used with devices utilizing 33, 34 or 45 pin parallel interfaces. **Never connect the parallel port directly to a parallel control cable.** The table below list the connector type, gender, pin and functions respectively.

DB9 Male (To controller)	Function	Notes	DB9 Female (To cable & VCR)	Function	Notes
1	NC	No Connect	1	SD	Serial Data (Sony Only)
2	D3	Data bit 3	2	REW	Rewind
3	D2	Data bit 2	3	REWSRCH	Rewind Search (Panasonic & JVC)
4	D1	Data bit 1	4	STOP	Stop
5	D0	Data bit 0	5	PLAY	Play
6	NC	No Connect	6	SYSCLK	System Clock (Sony Only)
7	+ 5 VDC	5 Volts DC (Positive)	7	STRB	Strobe (Sony only)
8	GND	Ground	8	GND	Ground
9	INT	Input for cassette sense	9	CASS	Cassette Sense

Part	Use	Notes
PSJ-0333	Used on Sony VTR's with 33 pin parallel interfaces	Includes PSJ-03 and cable
PSJ-0334	Used on Panasonic VTR's with 34 pin parallel interfaces	Includes PSJ-03 and cable
PSJ-0345	Used on JVC VTR's with 45 pin parallel interfaces	Includes PSJ-03 and cable

PSJ-0333CABLE - This cable is used with Sony decks utilizing a parallel 33 pin interface. All type 7 and 9 U-Matic models with a BKU-702, SVP-9000 and SVO-9600 with SVBK-100 interfaces installed. Type 5 U-Matics require the remote type to be set to "300".

DB9 Male	Function	Notes	33 Pin Male	Notes
1	SD	Serial Data	L	Serial Data for searching
2	REW	Rewind	11	Rewind command pin
3	NC	No Connect		No Connect
4	STOP	Stop	8	Stop command pin
5	PLAY	Play	13	Play command pin
6	SYSCLK	System Clock	D	System clock for searching
7	STRB	Strobe	J	Strobe (Series a 10 K resistor inside 33 pin shell)
8	GND	Ground	14, 10, S	Wire together inside 33 pin shell
9	CASS	Cassette Sense	7	Cassette In

PSJ-0334CABLE - This cable is used with Panasonic decks utilizing a parallel 34 pin interface. Typical models include the AG-7150 and AG-7350.

DB9 Male	Function	Notes	34 Pin Male	Notes
1	NC	No Connect	NC	No Connect
2	REW	Rewind	4	Rewind command pin
3	REWSRCH	Rewind Search	33	Rewind Search command pin
4	STOP	Stop	5	Stop command pin
5	PLAY	Play	2	Play command pin
6	NC	No Connect	NC	No Connect
7	NC	No Connect	NC	No Connect
8	GND	Ground	12	Ground
9	CASS	Cassette Sense	8	Cassette In

PSJ-0345CABLE - This cable is used with JVC decks utilizing a parallel 45 pin interface. (At this printing this cable has not been verified as fully functional.)

DB9 Male	Function	Notes	45 Pin Male	Notes
1	NC	No Connect	NC	No Connect
2	REW	Rewind	6	Rewind command pin
3	REWSRCH	Rewind Search	8	Rewind Search command pin
4	STOP	Stop	3	Stop command pin
5	PLAY	Play	4	Play command pin
6	NC	No Connect	NC	No Connect
7	NC	No Connect	NC	No Connect
8	GND	Ground	1, 15	Ground and Remote shorted inside 45 pin shell
9	CASS	Cassette Sense	?	Cassette In
			34, 21	Wire together inside 33 pin shell with a 1 K resistor

WUVR-01, WUVR-02 or IUVR-01 - These parallel interfaces were designed to control consumer or light duty industrial VCR's that have some type of one way (half duplex) control. For more information on the limitations these VCR's have, see INTRODUCTION-5 (Device Control) and KEYSCHEDULE-5 (Device and AutoSense Tape).

DB9 Male (To controller)	Function	Notes	3.5 MM Jack (To cable & VCR)	Function	Notes
1	- 5 VDC	5 Volts DC (Negative)	Tip	Serial Data	Half Duplex (Control only, no response from VCR)
2	D3	Data bit 3	Ring	Ground	
3	D2	Data bit 2			
4	D1	Data bit 1			
5	D0	Data bit 0			
6	NC	No Connect			
7	+ 5 VDC	5 Volts DC (Positive)			
8	GND	Ground			
9	NC	No Connect			

The WUVR/IUVR series interfaces are field re-programmable.

RS-422A - The RS-422A control port is configured for DTE (Data Terminal Equipment) pin configurations. If the device connected to the RS-422A port is configured for DTE a null adapter will be required. Sony and Panasonic VTR's with RS-422A control ports **DO NOT** require a null cable or adapter.

Pin out for 9 pin male RS-422A connector on **Ad-Maestro**.

DB9 Male (Rear of Ad- Maestro)	Function	Notes
1	GND	Ground
2	RCV -	Negative receive data
3	TRX +	Positive transmit data
4	GND	Ground
5	NC	No Connect
6	GND	Ground
7	RCV +	Positive receive
8	TRX -	Negative transmit
9	GND	Ground

The device serial port communications protocol can be set by the user. See KEYSCHEDULE-12 (Serial Port Parameters) for more information. The setting will automatically be set according to the selected device type.

Standard **Sony** protocol:

Item	Value	Notes
Baud Rate	38400	38,400 bits per second
Data bit (s)	8	8 data bits per word
Stop bits	1	1 stop bit between words
Parity	0	Odd parity

For Sony VTR's with RS-422A control, set device to Sony RS-422 and Device Serial Port Parameter to 38400, 8, 1, 0. By selecting SONY_422 the settings will default to these values.

Pin out for 9 pin female RS-422A connector on **VTR**.

DB9 Female (Rear of VTR)	Function	Notes
1	GND	Ground
2	TRX -	Negative receive data
3	RCV +	Positive transmit data
4	GND	Ground
5	NC	No Connect
6	GND	Ground
7	TRX +	Positive receive
8	RCV -	Negative transmit
9	GND	Ground

For Panasonic, JVC or other manufacturers VTR's with RS-422A control, set device to Sony RS-422 and Device Serial Port Parameter to 38400, 8, 1, O. The VTR's RS-422A control set up must be set to "OTHER" (Other emulates Sony).

This setting is made at the VTR, not the Ad-Maestro!

RS-232C - The RS-232C control port is configured for DTE (Data Terminal Equipment) pin configurations. If the device connected to the RS- 232C port is configured for DTE a null adapter will be required. Sony type 7 & 9 U-Matic model with a BKU-701, SVP-9000 and SVO-9600 with a SVBK-120 installed and UVW-1200 and 1400 **DO** require a null cable. Panasonic AG-7150 and AG-7350 models with a AG-IA232TC **DO NOT** require a null cable, or adapter.

Pin out for 25 pin male RS-232 connector on **Ad-Maestro**.

DB25 Male (Rear of Ad-Maestro)	Function	Notes
1	GND	Ground
2	TRX	Transmit data
3	RCV	Receive data
4	RTS	Ready to Send
5 - 6	NC	No Connect (Out, this pin is always asserted by the Ad-Maestro)
20	DTR	Data Terminal Ready (Out, this pin is always asserted by the Ad-Maestro)
7	GND	Ground
8-19	NC	No Connect
21-25	NC	No Connect

The device serial port communications protocol can be set by the user. See KEYSCHEDULE-12 (Serial Port Parameters) for more information. The setting will automatically be set according to the selected device type.

Factory setting for **Sony BKU-701** protocol:

Item	Value	Notes
Baud Rate	9600	9,600 bits per second
Data bits	8	8 data bits per word
Stop bits	1	1 stop bit between words

Parity	N	No parity
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Only the Baud rate may be adjusted with the BKU-701. Below is a list of Adtec suggested dip switch settings. ADTEC's suggested settings are the same as the factory default! For more information on dip switch settings ,see the BKU-701 operating instructions.

Dip switch settings for BKU-701:

Dip Switch	Setting	Notes
1	OFF	Video/Audio mute clear
2	OFF	Fast Forward clear
3	OFF	Operation selection when a cassette is inserted
4	OFF	Remote/local
5	ON	Baud rate (Switch 5 and 6 determine the baud rate)
6	ON	Baud rate (Switch 5 and 6 determine the baud rate)

Baud rate dip switch settings for **BKU-701**.

Switch Setting		Baud Rate
5	6	
OFF	OFF	1200
OFF	ON	2400
ON	OFF	4800
ON	ON	9600

Factory setting for **Sony SVBK-120** protocol:

Item	Value	Notes
Baud Rate	19200	19,200 bits per second (<i>Recommended setting is 9600 as the Ad-Maestro use 9600 as Sony_RS232 default. If 19,200 is used, then the device serial port settings need to be changed to 19,200.</i>)
Data bits	8	8 data bits per word
Stop bits	1	1 stop bit between words
Parity	N	No parity

Only the Baud rate may be adjusted with the SVBK-120 Below is a list of Adtec suggested dip switch settings. ADTEC's suggested settings are different from the factory default! *We recommend using 9600 as the baud rate.* For more information on dip switch settings ,see the SVBK-120 operating instructions.

Dip switch settings for SVBK-120:

Dip Switch	Setting	Notes
1	OFF	Video/Audio mute clear
2	OFF	Fast Forward clear
3	OFF	Operation selection when a cassette is inserted
4	OFF	Remote/local
5	ON	Baud rate (Switch 5 and 6 determine the baud rate)
6	OFF	Baud rate (Switch 5 and 6 determine the baud rate)

Baud rate dip switch settings for **SVBK-120**.

Switch Setting		Baud Rate
5	6	
OFF	OFF	2400
OFF	ON	4800
ON	OFF	9600
ON	ON	19200

Factory setting for **Sony UVW-1200 and UVW-1400:**

Item	Value	Notes
Baud Rate	9600	Baud rate selected using the “Remote Interface Menu”
Data bits	8	8 data bits per word
Stop bits	1	1 stop bit between words
Parity	N	No parity

Pin out for 25 pin female connector on **BKU-701 and SVBK-120.**

DB25 Female (Rear of VTR)	Function	Notes
1	GND	Ground
2	TxD	Transmit data
3	RxD	Receive data
4	NC	No Connect
5	NC	No Connect
6	DSR	Data set ready (Not used on Ad-Maestro)
7	GND	Ground
8-19	NC	No Connect
20	DTR	Data Terminal Ready (Out, this pin is always asserted by the Ad-Maestro)
21-25	NC	No Connect

Pin out for 25 pin female connector on **UVW-1200 and UVW-1400.**

DB25 Female (Rear of VTR)	Function	Notes
1	GND	Ground
2	TxD	Transmit data
3	RxD	Receive data
4	RTS	Ready to send
5	CTS	Clear to send (Not used on Ad-Maestro)
6	DSR	Data set ready (Not used on Ad-Maestro)
7	GND	Ground
8-19	NC	No Connect
20	DTR	Data Terminal Ready (Out, this pin is always asserted by the Ad-Maestro)
21-25	NC	No Connect

When connecting the Ad-Maestro to Sony RS-232C (BKU-701, SVBK-120 and UVW) a **NULL CABLE IS REQUIRED!**

Factory setting for **Panasonic AG-IA232TC** protocol:

Item	Value	Notes
Baud Rate	9600	9,600 bits per second
Data bit (s)	7	7 data bits per word
Stop bits	1	1 stop bit between words
Parity	O	Odd parity

All the settings are adjustable on the AG-IA232TC, see the “Description of DIP switches” in the operating instructions.

Pin out for 25 pin female connector on **AG-IA232TC**.

DB25 Female (Rear of VTR)	Function	Notes
1	GND	Ground
2	RxD	Receive Data
3	TxD	Transmit data
4	RTS	Shorted to Pin 5
5	CTS	Shorted to Pin 4
6	DSR	Shorted to Pin 20
7	GND	Ground
20	DTR	Shorted to Pin 6
8-19	NC	No Connect
21-25	NC	No Connect

When connecting the Ad-Maestro to Panasonic AG-IA232TC a **NULL CABLE IS NOT REQUIRED!**
Connect the cable to the RS-232C IN.

COMM Port - Each Ad-Maestro is equipped with a COMM IN and COMM THRU. The COMM IN connects to the computer or modem and the COMM THRU connects to the next Ad-Maestro in the network. Three adapters and three RJ-11 cables are included with your Ad-Maestro. The DB25 to RJ-11 and DB9 to RJ-11 labeled **Computer** are for interfacing directly to a PC. The DB25 to RJ-11 labeled **Modem** is for interfacing directly to a modem. An unlimited number of Ad-Maestro’s can be connected to a single modem or PC for remote communications.

COMM IN and COMM THRU:

RJ-11	Function	Notes
1	NC	No Connect
2	TRX	Transmit
3	GND	Ground
4	GND	Ground
5	RCV	Receive
6	NC	No Connect

Computer connector **DB25F to RJ-11**:

DB25 Female	DB25 Function	RJ-11	RJ-11 Function	Notes
1	GND	4	GND	Ground
2	TRX	2	TRX	Transmit
3	RCV	5	RCV	Receive
4	RTS	NC	No Connect	Short to 8 inside 25 pin housing
5	CTS	NC	NC	No Connect

6	DSR	NC	NC	No Connect
7	GND	3	GND	Ground
8	DCD	NC	No Connect	Short to 4 inside 25 pin housing
9-19	NC	NC		No Connect
20	DTR	NC		No Connect
21	NC	NC		No Connect
22	RI	NC		No Connect
23-25	NC	NC		No Connect

Computer connector **DB9F to RJ-11:**

DB9 Female	DB25 Function	RJ-11	RJ-11 Function	Notes
1	DCD	NC	NC	Short to 7 inside 9 pin housing
2	TRX	2	TRX	Transmit
3	RCV	5	RCV	Receive
4	DTR	NC	NC	No Connect
5	GND	3	GND	Ground
6	DSR	NC	NC	No Connect
7	RTS	NC	NC	Short to 1 inside 9 pin housing
8	CTS	NC	NC	No Connect

Modem connector **DB25M to RJ-11:**

DB25 Male	DB25 Function	RJ-11	RJ-11 Function	Notes
1	GND	4	GND	Ground
2	TRX	5	TRX	Transmit
3	RCV	2	RCV	Receive
4	RTS	NC	NC	Short 4 to 5 and 20 inside 25 pin housing
5	CTS	NC	NC	Short to 4 and 5 inside 25 pin housing
6	DSR	NC	NC	No Connect
7	GND	3	GND	Ground
8	DCD	NC	NC	
9-19	NC	NC		No Connect
20	DTR	NC		Short to 4 and 20 inside 25 pin housing
21	NC	NC		No Connect
22	RI	NC		No Connect
23-25	NC	NC		No Connect

Modem connector **DB9M to RJ-11:** (This item is not a standard item and must be ordered)

DB9 Male	DB9 Function	RJ-11	RJ-11 Function	Notes
1	NC	NC	NC	No Connect
2	RCV	2	RCV	Receive
3	TRX	5	TRX	Transmit
4	DTR	NC	NC	Short 4 to 7 and 8 inside 9 pin housing
5	GND	3 and 4	GND	Ground
6	NC	NC	NC	No Connect

7	RTS	NC	NC	Short to 4 and 7 inside 9 pin housing
8	CTS	NC	NC	Short to 4 and 8 inside 9 pin housing
9	NC	NC	NC	No Connect

A 9 pin to 25 pin serial adapter can be used to interface 9 pin modems to the Ad-Maestro.
Modem Initialization

Please note that the initialization string required for the Practical Peripherals PM144T modem should be entered as follows: **AT&K4S0=1** If other modems are used, it is recommended to use the default initialization as described in step 4 (option 2) below. Remember to complete steps 1 - 3 before setting the default string. After the modem is initialized, then you may attempt to customize the string to optimize data transfers. The AT&K4S0=1 string below will provide the highest speed (57,600) data transmissions between the Ad-Maestro's and Conductor utilizing the PM144T. This AT&K4S0=1 string must only be entered into the Ad-Maestro that is connected to the modem.

Set the PC serial port to:

57600,8,1,N

This setting must be the same on all Ad-Maestro's connected via the comm port in and thru. Refer to KEYSCHEDULE-11 in the operations manual for more information.

Step 1 - Use the DB25 M to RJ11F adapter with the MODEM label to connect the modem and one Ad-Maestro. Connect additional Ad-Maestro's by using the 3' RJ11 cables to connect the comm port THRU to the comm port IN and so on. A unlimited number of Ad-Maestro's may be connected to a single modem.

Step 2 - Name each Ad-Maestro with a unique name. Syntax is of the most importance as any communications with the units will require exact unit names. There is no way to connect or find out unit names remotely. Please note the unit names and exact syntax. Upper and lower case letters do not matter.

Step 3 - Set the PC serial port settings on all the Ad-Maestro's connected to the modem to the baud, data, stop and parity settings described above.

Step 4 - (Option 1) Enter the initialization string in the *Initialize Modem* screen on the Ad-Maestro connected to the modem. Once the string has been entered, perform a software reset to let the Ad-Maestro initialize the modem.

(A software reset is accomplished by holding the RIGHT, MODE and ESCAPE keys simultaneously for 1 second)

Step 4 - (Option two) Enter the *Initialize Modem* screen and hold the ENTER and UP key simultaneously to enter the most basic initialization string. This will enter the letters AT only in the Initialize Modem screen and commands will flash in the

display notifying you whether the modem is *initializing*, *initialized* or if there is a *modem error*.

- a) ***Initializing***: The Ad-Maestro is attempting to communicate with the modem. Please give the unit at least 30 seconds to perform this function.
- b) ***Initialized***: The Ad-Maestro has successfully initialized the modem.
- c) ***Modem Error***: The Ad-Maestro has attempted five times to initialize the modem with no success. Check the connections to the modem and Ad-Maestro. Make sure the DB25M connector labeled modem is connected to the modem and the RJ11 cable is connected to the comm port IN.

Once the modem has been initialized by the Ad-Maestro, then edit the Initialize Modem menu option and add the &K4S0=1 to the AT so that the screen reads;

AT&K4S0=1

You are now ready to use the Conductor software to perform remote control functions with your Ad-Maestro's.

Common Errors:

1. **The modem initialization string is not correct**
2. **The connection between the Ad-Maestro and modem is not correct**
3. **The connection between Ad-Maestro's is not correct.**

Pin out for 25 pin female (Printer Parallel) connector on **Ad-Maestro**.

DB25 Female (Rear of Ad- Maestro)	Function	Notes
1	STR	Strobe
2	D 0	Data Bit 0
3	D 1	Data Bit 1
4	D 2	Data Bit 2
5	D 3	Data Bit 3
6	D 4	Data Bit 4
7	D 5	Data Bit 5
8	D 6	Data Bit 6
9	D 7	Data Bit 7
10	ACK	Acknowledge
11	NC	No Connect
12	NC	No Connect
13	NC	No Connect
14	NC	No Connect
15	NC	No Connect
16	NC	No Connect
17	SIN	Select Input (Not used)
18	D 0G	Data Bit 0 Ground
19	D 1G	Data Bit 1 Ground
20	D 2G	Data Bit 2 Ground
21	D 3G	Data Bit 3 Ground
22	D 4G	Data Bit 4 Ground
23	D 5G	Data Bit 5 Ground
24	D 6G	Data Bit 6 Ground
25	D 7G	Data Bit 7 Ground

A standard Centronics printer cable will connect the Ad-Maestro to most parallel printers. The Ad-Maestro printer software outputs simple ASCII II character log only (no command or control codes).

The Parallel Printer port also serves as a GPI status port for the Ad-Maestro. This can be used to supply TTL information to third part insertion gear regarding the status of the Ad-Maestro. Below is a list of the connections and TTL levels associated with the current status.

Network GPI Status connections

Data Bit	Pin #	Use
D 0	2	Network 1 signal On Air
D1	3	Network 1 signal On Air
D 2	4	Device Pre-Roll status
D 3	5	Satellite (Network 1) video status
D 4	6	Network 2 signal On Air
D 5	7	Network 2 signal On Air
D 6	8	Device Pre-Roll status
D 7	9	Satellite (Network 2) video status

Network GPI Status levels

Network 1 status levels.

Data Bit	Data Bit	Status	Data Bit	Status	Data Bit	Status
D0	D1		D2		D3	
0	0	Auxiliary "ON AIR"	0	Pre-Rolling "YES"	0	Satellite (Network) Video "Present"
0	1	Satellite (Network) "ON AIR"	1	Pre-Rolling "NO"	1	NO Satellite (Network) Video
1	0	Device "ON AIR"				
1	1	Nothing "OFF AIR"				

Network 2 status levels.

Data Bit	Data Bit	Status	Data Bit	Status	Data Bit	Status
D4	D5		D6		D7	
0	0	Auxiliary "ON AIR"	0	Pre-Rolling "YES"	0	Satellite (Network) Video "Present"
0	1	Satellite (Network) "ON AIR"	1	Pre-Rolling "NO"	1	NO Satellite (Network) Video
1	0	Device "ON AIR"				
1	1	Nothing "OFF AIR"				

The levels are TTL and can be directly connected to TTL level inputs provided on the third party insertion gear. Contact Adtec's customer service if additional support is required to interface the parallel GPI status to third party hardware.

AdMaestro Version 5.00 Report Structure

All reports are generated as ASCII text files.
 A report consists of up to 1023 successive lines.
 Each line consists of exactly 75 viewable Uppercase ASCII characters and a <CR><LF> (ASCII 0x0D & ASCII 0x0A) line termination sequence .
 Each line consists of exactly 10 comma (',') delimited fields.
 All fields are left justified and padded with spaces (' ').

LINE & FIELD STRUCTURE:

AAAAAAAA,BBBB,CCC,D,EE,FF/FF/FF,GG:GG:GG,HH,IIIIIIIIII,JJJJJJJJJJJJ

AAAAAAAA= AdMaestro Name. This identifies the unit that generated the listing.

RANGE- Any sequence of up to 8 uppercase alpha-numeric characters.

EXAMPLE- 'TCI0123', 'BOBSUNIT', 'CCHE-1'

BBBB= Network Name. This identifies the network name, which will typically be the call letters.

RANGE- Any sequence of up to 4 uppercase alpha-numeric characters.

EXAMPLE- 'CNN', 'TNT', 'COMY', 'WGN'

CCC= Network Channel Number. This identifies the network channel number, which will typically be the cable channel number used for

broadcasting.

RANGE- A sequence of up to 3 numeric characters, '1' through '999'. It may optionally be all spaces.

EXAMPLE- '2', '33', '110'

D= Controller Network #. This identifies which network within the controller was affected by the operation, 1, 2 or neither.

RANGE- 1 numeric character, '1' or '2'. it may optionally be a space if the message is not network specific.

EXAMPLE- '1', '2', or ''

EE= Weekday. This is a time stamp of when an operation occurred.

RANGE- 2 uppercase alpha characters.

EXAMPLE- 'SU', 'MO', 'TU', 'WE', 'TH', 'FR', or 'SA'

FF/FF/FF= Month/Date/Year. This is a time stamp of when an operation occurred.

RANGE- 8 characters in the format of 'MM/DD/YY'.

EXAMPLE- '02/29/96', '12/25/95', '08/01/94'

GG:GG:GG= Hour: Minute: Second (24 HR Mode). This is a time stamp of when an operation occurred.

RANGE- 8 characters in the format of 'HH:MM:SE'.

EXAMPLE- '00:23:56', '03:02:49', '18:22:00'

HH= Message Identifier. This is a numeric identifier of the operation.

RANGE- 2 hexadecimal characters, '00' thru 'FF'.

EXAMPLE- '81', 'E4', 'F1', '92'

IIIIIIIIII= Message description. This is a verbal description of the operation.

RANGE- Up to 15 alpha-numeric characters.

"N1 ID COMERCIAL"	Commercial ID tones for Net 1
"N2 ID COMERCIAL"	Commercial ID tones for Net 2
"N1 MISS TONE "	Missed spot by tones on Net 1
"N1 MISS GPIC "	Missed spot by GPI closed on Net 1
"N1 MISS GPIO "	Missed spot by GPI open on Net 1
"N1 MISS GPIA "	Missed spot by GPI always on Net 1
"N1 MISS KEY "	Missed spot by keypad on Net 1
"N1 MISS TERM "	Missed spot by terminal on Net 1
"N2 MISS TONE "	Missed spot by tones on Net 2
"N2 MISS GPIC "	Missed spot by GPI closed on Net 2
"N2 MISS GPIO "	Missed spot by GPI open on Net 2
"N2 MISS GPIA "	Missed spot by GPI always on Net 2
"N2 MISS KEY "	Missed spot by keypad on Net 2
"N2 MISS TERM "	Missed spot by terminal on Net 2
"N1 CANCEL VID "	Canceled spot by video loss on Net 1
"N1 CANCEL KEY "	Canceled spot by keypad on Net 1
"N1 CANCEL TERM "	Canceled spot by terminal on Net 1
"N2 CANCEL VID "	Canceled spot by video loss on Net 2
"N2 CANCEL KEY "	Canceled spot by keypad on Net 2
"N2 CANCEL TERM "	Cancelled spot by terminal on Net 2
"N1 LAUNCH TONE "	Launched spot by tones on Net 1
"N1 LAUNCH GPIC "	Launched spot by GPI closed on Net 1
"N1 LAUNCH GPIO "	Launched spot by GPI open on Net 1
"N1 LAUNCH GPIA "	Launched spot by GPI always on Net 1
"N1 LAUNCH KEY "	Launched spot by keypad on Net 1
"N1 LAUNCH TERM "	Launched spot by terminal on Net 1
"N2 LAUNCH TONE "	Launched spot by tones on Net 2
"N2 LAUNCH GPIC "	Launched spot by GPI closed on Net 2
"N2 LAUNCH GPIO "	Launched spot by GPI open on Net 2
"N2 LAUNCH GPIA "	Launched spot by GPI always on Net 2

"N2 LAUNCH KEY "	Launched spot by keypad on Net 2
"N2 LAUNCH TERM "	Launched spot by terminal on Net 2
"N1 ROUTE SAT "	Routed SATELLITE signal onto Net 1
"N1 ROUTE COM "	Routed COMMERCIAL signal onto Net 1
"N1 ROUTE AUX "	Routed AUXILLARY signal onto Net 1
"N1 ROUTE OFF "	Routed OFF signal onto Net 1
"N2 ROUTE SAT "	Routed SATELLITE signal onto Net 2
"N2 ROUTE COM "	Routed COMMERCIAL signal onto Net 2
"N2 ROUTE AUX "	Routed AUXILLARY signal onto Net 2
"N2 ROUTE OFF "	Routed OFF signal onto Net 2
"N1 END TONE "	Ended spot by tones on Net 1
"N1 END GPIC "	Ended spot by GPI closed on Net 1
"N1 END GPIO "	Ended spot by GPI open on Net 1
"N1 END GPIA "	Ended spot by GPI always on Net 1
"N1 END AVAIL "	Ended spot by avail time on Net 1
"N1 END VID "	Ended spot by video loss on Net 1
"N1 END KEY "	Ended spot by keypad on Net 1
"N1 END TERM "	Ended spot by terminal on Net 1
"N2 END TONE "	Ended spot by tones on Net 2
"N2 END GPIC "	Ended spot by GPI closed on Net 2
"N2 END GPIO "	Ended spot by GPI open on Net 2
"N2 END GPIA "	Ended spot by GPI always on Net 2
"N2 END AVAIL "	Ended spot by avail time on Net 2
"N2 END VID "	Ended spot by video loss on Net 2
"N2 END KEY "	Ended spot by keypad on Net 2
"N2 END TERM "	Ended spot by terminal on Net 2
"VTR LOADED "	VTR loaded tape
"VTR UNLOADED "	VTR unloaded tape
"VTR PLAYING "	PLAY command sent to VTR
"VTR STOPPED "	STOP command sent to VTR
"VTR REW SRCHING"	REW SEARCHING command sent to VTR
"VTR REWINDING "	REWIND command sent to VTR
"VTR PARKING "	VTR began parking tape
"VTR PARKED "	VTR found park marking
"VTR PARK ERROR "	VTR failed to properly park tape
"-- POWER UP ---"	Unit was powered up
"---- RESET ----"	Unit was reset

EXAMPLE- 'N1 ID COMERCIAL ', '---- RESET ----'

JJJJJJJJJJJJ= Tones/Commercial ID. This is the identification tones used to verify commercial spots.

RANGE- Up to 15 DTMF characters.

EXAMPLE- '123*', 'D1298', '67A76'

SAMPLE LISTING:

```
VIACOM3 , , ,TH,02/29/96,17:42:35,F0,-- POWER UP ---,
VIACOM3 ,CNN ,32 ,1,TH,02/29/96,18:00:40,80,N1 ID COMERCIAL,A4567
VIACOM3 ,CNN ,32 ,1,TH,02/29/96,18:01:10,80,N1 ID COMERCIAL,A6529
VIACOM3 ,ESPN,16 ,2,TH,02/29/96,18:09:20,81,N2 ID COMERCIAL,A5324
VIACOM3 ,CNN ,32 ,1,TH,02/29/96,18:09:22,90,N1 MISS TONE ,
```

Explanation:

LINE 1-

AdMaestro unit named 'VIACOM3' was powered up at 17:42:35 on Thursday, February 29, 1996. The network name and numbers and ID tones are all blank, since they are not relevant.

AD-MAESTRO

VERSION 5.0

TECHNICAL REFERENCE

LINE 2-

AdMaestro unit named 'VIACOM3' confirmed a commercial spot with the ID markings 'A4567' on 'CNN', cable channel 32, at 18:00:40 on Thursday, February 29, 1996. The unit network is 1.

LINE 3-

AdMaestro unit named 'VIACOM3' confirmed a commercial spot with the ID markings 'A6529' on 'CNN', cable channel 32, at 18:01:10 on Thursday, February 29, 1996. The unit network is 1.

LINE 4-

AdMaestro unit named 'VIACOM3' confirmed a commercial spot with the ID markings 'A5324' on 'ESPN', cable channel 16, at 18:09:20 on Thursday, February 29, 1996. The unit network is 2.

LINE 5-

AdMaestro unit named 'VIACOM3' received tones requesting a commercial spot on 'CNN', cable channel 32, at 18:09:22 on Thursday, February 29, 1996, but it was unable to accommodate due to the current use of the VTR by the other network. The unit network is 1 and the ID tones are all blank, since they are not relevant.

Intentionally left blank.